Issue No. 12

December, 1956

AIR COOLED NEWS

PUBLICATION OF

THE H. H. FRANKLIN CLUB

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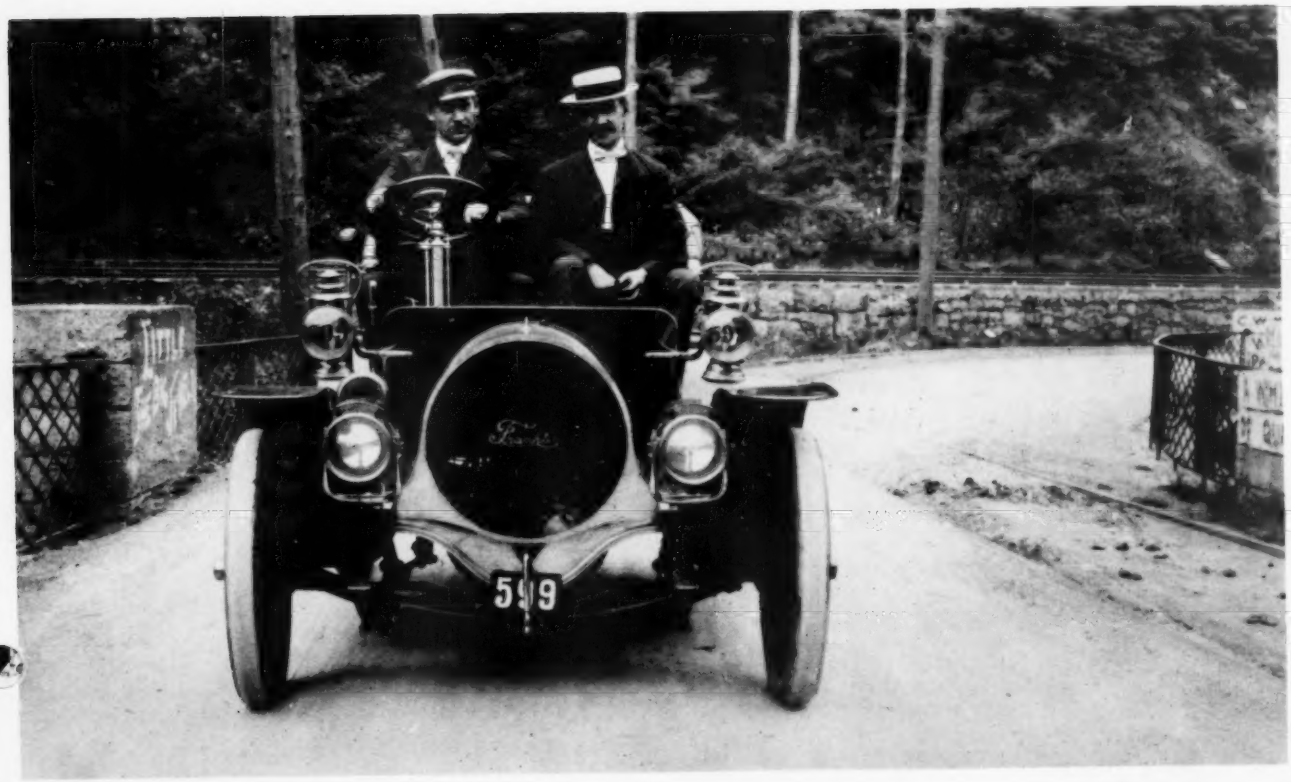

The H. H. Franklin Club was formed in 1951 at Los Angeles. The original purpose was to establish a medium through which Franklin history could be written.

Later the Club was reorganized on a more conventional basis, though the magazine remained the keynote of the organization. Within five years the Club has grown from the original ten to about 500 members.

AIR COOLED NEWS, published three times yearly has become one of the best of the automobile club magazines. In addition to its main purpose of telling the Franklin story, it also offers a Classified Section and a Technical Department conducted by Mr. John Burns, the greatest living Franklin expert.

Another valuable service is the Information Center conducted by Mr. Henry Courten which provides a clearing house for all matters other than membership or general business.

The Club's car emblem, shown above, is probably the finest emblem used by any club. It is struck in ordanance bronze from hand engraved dies in the manner of a coin. A line of Club jewelry of fine quality was designed and is manufactured by member Athol Odell.

The Club has enjoyed the best of relations with the major clubs and includes many of their past and present officials as members. This Club urges its members to also affiliate with at least one of the major antique car clubs.

THE FRANKLIN TREK, our annual meeting and gathering is held each year at Syracuse, usually in August.

One of the greatest benefits of the Club is that intangible "Franklin Spirit" that must be experienced to be understood. It is a part of the old Franklin tradition that has descended with the cars to their new owners.

THE H. H. FRANKLIN CLUB

MEMBERSHIP APPLICATION

Make your check payable to the Club and mail with this form to:

Stanley D. Wilkinson, Jr., 1826 Gregg Street, Philadelphia 15, Pennsylvania

Name (print) _____

Address _____

Town _____ State _____

AIR COOLED NEWS MAILING LIST (for the Editor)

Name (print) _____

Address _____

Town _____ State _____

Franklin Cars Owned (if any)

YEAR	MODEL or SERIES	BODY STYLE	CONDITION

I plan to attend the FRANKLIN TREK, Yes_____ No_____

DATA FOR (THE PRESIDENT)

Name (print) _____

Address _____

Town _____ State _____

Enclosed is check or money order for dues $3.50

____HHFC bronze car emblems, $4.35 ea. pp. _____

Back issues Air Cooled News—$1.00 each _____

HHFC Lapel Button or Pin $5.50 pp. _____
Illustrated Above

DATA FOR TREASURER TOTAL _____

SUPPLEMENT #1 TO AIR-COOLED NEWS 2-1-57

This is the pilot issue of a new HHFC service. As you know ACN appears but three times a year, leaving a large time lapse between the submittal and publication of classified ads. We propose to publish a monthly, up-to-date, supplementary listing of all these ads. It is to be stressed that the new listing will in no way replace ACN, in fact all new ads will eventually be repeated in the regular classified section of the magazine. Thru the new system we hope to rescue cars and parts on the verge of being scrapped because the owners lack storage space.

In this first issue all the ads for complete cars and major components, which appeared in ACN #3 thru #10, are repeated for the benefit of members who joined the club in recent months. Many of the items are probably no longer available, however, the rescue of just a few cars will make the whole project worthwhile. Your cooperation in keeping us posted on their present availability is essential.

Supplement #1 has been published at no cost to the club by taking advantage of the free ride with Issue 12 of ACN. Printing and mailing of approximately 500 copies each month would make the cost prohibitive since only a limited number of members are directly benefited; therefore, subsequent editions will be forwarded only upon the receipt of a self-addressed, stamped envelope by the fifteenth of each month. In this manner we expect to furnish copies only to those seriously interested.

Please address all ads, requests, and other related correspondence to H. H. Franklin Club, Classified Editor, Box 127, Bethpage, New York. This address supersedes those in Bayshore, New York and Palmdale, California.

Parts	Joseph James	552 Woodland Dr., Hempstead, N. Y.
Parts	A. H. Clark	412 Beacon St., St. Paul, Minn.
Parts Series 10 up (sed)	Peter Kashi	167 Fourth St., Bridgeport, Conn.
Parts Series 13 thru 19	Kelly Motor Sales	c/o Peterson 9 Brimmer St. Boston, Mass.
Parts & Parts cars 1928-1933	Carter's Garage	S. Franklin St., Brookville, Mass.
Parts	Sam Adelman	635 S. Columbus Ave., Mt. Vernon, N. Y.
1902 Rear Ent. Tonneau (Cross engine) Restored $2200	A. A. Hood	458 Franklin Ave. Wycoff, N.J.
1902 Runabout	H. Baker	20 Lakeside Dr., S.E.Grand Rapids, Mich.
1907 Mod. "G" Touring restored $950	John W. Hebden,	411 Newport Ave. S. Attleboro, Mass.
1907 Mod. "G" Runabout Comp. restored	W. W. Fife	633 S. Hendricks Ave., Los Angeles 22, Calif.
About 1908 Mod. "G" Runabout Good, unrestored cond. $750	H. A. Croco,	910 S. Jackson,Casper, Wyo.
1914 Mod. M Touring 1920 Series 9B V Windshield 2 dr. Sedan 1928 Series 12A Sedan	Tom McBath	Box 137, Wallawa, Oregon
1922 Touring	J. J. McFadden	107 E. Central Ave., Moultrie, Ga.
1922 Town Coupe Excellent	Falzey Sales	22600 Woodward Ave., Detroit, Mich.
1923 Demi-Sedan Orig.	J. P. Fleming	1002 Chittock Ave., Jackson, Mich.
1923 Touring Mech. good, body fair	F.W. Cowan	15 Brae Road, South Deerfield, Mass.
1923 Series 10 B Sedan	Sy Morris	1208 Cooper, South Bend, Ind.
1923 Coupe restored	Nick Manelli	134 Hawthorne Ave., Waterbury 44, Conn.
1923 Demi Sedan, 1924 Coupe, 1929 Sedan, 1933 Olympic,	A.H. Clark,	412 Beacon St. St. Paul, Minn.
1924 Sedan	Gordon Wing	81 Markowitz St., Carteret, N. J.
1924 Series 10 Sedan, 1932 Airman Conv. Coupe	R. C. Clark,	67 W. Genesee St. Skaneateles, N. Y.
1933 Airman Sedan, Series 10 B 4 Pass. Coupe	W. H. B. Simpson,	Box 2326, Greenville, S. C.
1925 Series 10 C. Sedan, solid, eng. overhauled 2 new tires $150	Howard Dircks	421 S. River Dr., Algonquin, Ill.
1925 Series 11 A. Coupe	R. H. DeHart	293 W. Emerson St., Melrose 76, Mass.
Series 11B Sedan, Good	B. S. Harrington	105 Roanoke Ave., Atlanta 5, Ga.
1925 Sedan	Frank Gardner	80 Bigelow Road, West Newton, Mass.
1925 Touring Comp. Equipped $450	J. Setchel	Box BB, Carmel, Calif.

1925 Model 135 4 Dr. Sedan — Ray R. Overman — 221 7th Ave., Lewiston, Idaho
1926 4 Pass. Coupe $250 — John S. Coleburn — RFD #1, Wilton, Conn.
1926 Victoria Coupe Orig. Cond. — Lewis M. Caldwell — Townsend St., Pepperell, Mass.
1926 Coupe $750 — A. H. Kruger — Fresno 3, Calif.
1927 Sedan Excellent Cond. — George E. Bowles — 402 Clapp Memorial Bldg. Portland Maine
1927 Coupe (Lead) — Miss L. H. Young — 426 N. Santa Fe, Tulsa, Okla.
1928 Victoria Excellent Mech. & Tires, poor paint, top, uphol. $125 — T. J. Berkefeld — 326 Orchid Ave. Corona Del Mar, Calif.
1928 Sedan very clean $200 — L. K. Hakes — 9729 McDowell Pl., Overland 14, Mo.
1928 Airman Sedan Series 12B, 6 wire wheels, good tires, new paint, motor overhauled $785 — L. E. Humphrey — 334 Highland Ave., Meadville, Pa.
1928 Dietrich Conv. Sedan — John L. Ludlow — 667 4th Ave., Westfield, N. J.
1928 Series 12A Conv. Coupe Rest. — Ed. E. Bennet — Box 15, Beverly Hills, Calif.
1928 Series 12A Sed. Rest. $400 — E. W. Jenckes — Box 152 School St., Plainville, Mass.
1928 Series 12B Sedan — Ed. A. Sammis — 146 Yale St., Roslyn Heights, N. Y.
1928 Series 12A Oxford Sedan — F. F. Humphreys — 32 Espy Road, Caldwell, N. J.
1929 4 Dr. Sedan mech. perf. 6 new tires $200 or offer — C. L. Stumpf RFD 1 Royalton Rd Strongsville, Ohio
1929 "Speedster" 4 dr. Sedan, Excell. mech. cond., new top, seat covers, wire wheels, original manual includ., not driven since 1931 — Walter E. Johnson 7 Roxbury Ave., Natick, Mass.
1929 Model 135 Sport Sedan — J. E. Charbonnel — RFD #3, Colville, Wash.
1929 Airman Mod. 135 Roadster 6 wire wheels — G.L. Smith 8075 Golden Star Ave. Riverside, Calif.
1929 Mod. 130 Sedan Excell. mech., new top, paint, 2 tires, radio $300 — T. J. Berkefeld — 326 Orchid Ave. Corona Del Mar, Calif.
1929 Airman Sedan 6 wire wheels $50 — K. W. Leibee — 328 Marlow Dr., Oakland 5, Calif.
1929 Sedan, 1931 Sport Salon — Stan. D. Grundy — RFD 1 Whippany Rd., Whippany, N. J.
1929 Mod. 130 Conv. $650 — L. B. Conner — 310 24th St. No. Great Falls, Mont.
1929 4 Dr. Sedan $200 — Lewis Massie — 1518 26th St., Lubbock, Texas
1929 Series 130 Brougham, 1932 Series 16 Sedan — A. W. Burnham 712 Chestnut St., Waban, Mass.
1929 7 Pass. Sedan — A. E. Stowell — Dunlap Rte., Roswell, New Mexico
1929 Series 137 Roadster, 1930 Series 145 Sedan, 1930 Series 147 7 Pass. Sedan — E. J. Parker — 1011 7th St., Plainfield, N. J.
1930 Coupe (Lead) — Mrs. L. H. Young — 426 N. Santa Fe, Tulsa, Okla.
1930 "Pirate" 5 Pass. Conv. Sedan — John Moehlman — 534 20th St., Hermosa Beach, Calif.
1930 Conv. Coupe — Frank Kinzinger — 2417 Cadillac Tower, Detroit 26, Mich.
1930 Deauville Sed. by Dietrich Good Cond. — Bab L. Melroy 548 Muskingum Ave. Pacific Palisades, Cal.
1930 4 Dr. Conv. by Dietrich $650 — Joe W. Rancier — 440 Lafayette Pl. NE Albuquerque N.M.
1930 Mod. 147 Sedan — Leon Beatty — 5639 LaJolla Blvd., LaJolla, Calif.
1930 Series 127 Sedan $250 — Robert Wingate — 174 White St., South Weymouth, Mass.
1931 Dietrich Town Car Beautiful $575 — Paul R. Driscoll — Box 1796, Yukon, Fla.
1931 Roadster — Alex H. Codd, Jr. Loomis-Sayles Co. 140 Federal St. Boston 10 Mass.
1931 Conv. Coupe — James B. Beal — Wagon Wheel Lodge, Boulder, Colo.
1931 4 Door Sedan — Roy E. Weatherby — 2781 Firestone Blvd. South Gate Calif.
1931 Series 15 Mod. 153 Club Sedan — S. B. Jackson — 8033 Perry Ave., Chicago, Ill.
1931 4 Dr. Sedan 1 Owner — W. E. Christman — Greenwood Lake, New York
1931 Airman 4 Dr. Sedan $275 — Paul S. Corson — Rt. #3, Smyrna, Ga.
1931 Dietrich Sedan — Roy Wesenberg — 7050 W. 5th St., Denver 15, Colo.
1932 Airman 5 Pass. Brougham Trunk 6 Wood Wheels $350 — L. Canterman 4420 Encinas Dr. LaCanada Calif
1932 Airman Club Sedan, 1933 Olympic Conv. Coupe — H. Briggs 1337 S. Palomares Ave. Pomona, Calif.
1932 Series 16 Airman 4 Dr. Sed. fully rest. $785 — A. G. Rippey, 2525 E. Exposition Ave. Denver Col
1932 Series 16 Sedan $200 — Margaret Lewis — Snow Shoe Inn 53 Main St. Camden, N.Y.
1933 Olympic $250 — Frank H. Beck — R. R. #2, Marengo, Ill.
1933 Olympic Sedan A-1 $450 — O. F. Springer, Jr. — 339 Bay St., Springfield, Mass.
1933 V 12 Sedan $700 — A. B. Cox — 3023 Cudahy St. Huntington Park, Calif.
1933 Olympic Sedan Orig. Owner Orig. Cond. — Mrs. Doris Kamrar 2501 Isabelle Ave. SanMateo, Calif.
1934 Series 17 V 12 Sedan — Bill Miller — P. O. Box #1 Port Chester, N. Y.
1934 Olympic Sedan — Ralph E. Thoreson — 2121 E. 7th St., Vancouver, Wash.

The story of the FRAPSVILLE MEET appeared several years ago under anonymous authorship in GOGGLES AND GAUNTLETS, a paper published by the Great Lakes Region of VMCCA. Some recent espionage turned up the interesting fact that "Quincy Queemby" is none other than HHFC member Howard G. Dunbar of Toledo. Through the courtesy of Author, Publisher and unnamed HHFC "Angel" we are enabled to send you this amusing story as an enclosure with AIR COOLED NEWS. ..... Editor.

SUB-REGIONAL MEET AT FRAPSVILLE
by Quincy Queemby

May 1st marked the date of the sub-regional meet at Frapsville, 32 miles sway, and the rising sun found us completing our preparations for an early start. Our 1906 Verdis had been dusted and shined, and many hours had been spent in getting ready. In case a late return should make night driving necessary, I had removed the acetylene headlamp shells and attached the electric lamps from my '29 Ford, and a lantern was hung on the rear. The emergency kit had been checked and refilled with bailing wire, tape, gum, etc., and at last all was in readiness. The lunch was put under the rear seat, and it was just 6:00 A.M. as I twisted the ignition wires together, ready to go.

The Verdis was as eager to be on the way as we, for it started in less than 30 minutes, and by 6:45 we were leaving Shapeless behind. Due to the extra weight of the repair parts which we were carrying, the clutbh slipped badly on Meeker's Hill, however, our sprag was in place and we were in no danger of sliping back. In a short time one of the local youths happened by on his Whizzer bike and towed us over the summit. In order to cool the motor, I coasted down the other side of the hill. There is a sharp turn near the bottom, and I noticed that the brakes did not seem to be slowing us down at all. For emergencies such as this, we always carry a 100 lb. bag of sand, which is tied with a long rope to the rear axle. I gave the command "Bag over the side!", and my cohorts hastily complied. I had understimated our speed, however, and when the rope came taut, it jerked the rear axle out from under us, the car slewed widly, and we careened into the shallow ditch along the road.

Fortunately, examination proved there had been little real damage. The spring bolts had pulled out, where the frame was rotted, allowing the shaft to slip out along the splines. Jacking up the chassis, we put the axle back in place on our way.

Several miles further down the road, we hit a rather severe bump, and the motor died. We spent considerable time checking all the connections, etc. but could find nothing amiss. Remembering a past experience of mine, I even checked the sediment bowl, but it was good and full of sediment. Then I tried blowing through the fuel line, and found it plugged. Here was our trouble, at last! Some of the gum plugging the leaks had worked through into the line and blocked it. After that, it was the work of but a few moments to clean the line, shew up some fresh gum, and put it on. The motor now responded nobly, and we were on our way once more.

It was now 9:50, and while we had put $4\frac{1}{2}$ miles behind us, we still had 28 more to go, so we pressed on, harder than ever. Outside of 3 or 4 stops to replenish the water in the radiator, the next two miles were uneventful, and our spirits were high as we sped along. Then the front end of the car began to sag, and I noticed that the right front wheel had come off and was rolling along ahead of us. I was not disconcerted, as this had happened before. The threads on the end of the axle are stripped, and the string used to wedge the nut on always

chafes through. Hoever, this time we were unable to locate the nut, search as we might. This posed somewhat of a predicament, as we had no spare. I finally cut a small block of wood from a fence post, and with my pen knife, carved a hole through it, slightly smaller than the axle. We then drove the block into the axle, and it seemed to hold even tighter than the nut used to. I glanced at my watch again, as we started, and noticed that it was just a quarter to eleven.

About this time, it began to rain, and we stopped again, to tie the oilcloth over the top, stopping the worst of the water from coming through the holes. While we were thus engaged, the motor sputtered and died. I suspected the trouble at once. The top to the coil box is missing, and the rain had shorted out one of the coils. After due testing, it was found to be number 3 coil, so I merely switched it with number 2 coil. Number 2 cylinder doesn't work, so it little matters whether its coil is sparking or not.

Our spirits were somewhat dampened about this time, entirely aside from the rain. We had still about 25 miles to go, and it was already 11:30. Since the meet started at 1:00, it was evident that we should have to make better time during the remainder of the trip. We pressed on again, and being somewhat hungry from our various exertions, decided to eat a sandwich as we drove. We got out the hamper, but to our dismay found that it had slid over under the fuel line, and one of the leaks had soaked everything with gasoline. However, as my cousin pointed out, our luck was not entirely bad, as we had covered 8 miles since starting without any tire trouble whatever. Of course, this was partly due to the fact that the car was equipped with solid tires, which I had made by filling the old carcasses with a rubber compound which I devised.

At this point, there came a loud noise from beneath the car, and we ground to a sudden halt. With my knowledge of mechanics, I soon discovered that second gear had gone out, completely. This was apparently due to the constant use of it since the high gear went out last fall. This left us only low or reverse gears, and we were a glum lot as we realized we would probably be late for the meet, as everyone agreed that it was unlikely that we could make the remaining 24 miles in the 45 minutes before 1:00 o'clock, especially driving in low gear. However, the Queemby motto is, "Better late, if possible, than not at all", so we determined to carry on. Apparently, though, a piece of the gear, or something, had gotten into the motor, and it was impossible to turn it over. While discussing our next move, I spied a shed alongside the road, so we pushed the car into it, and reluctantly decided to leave it there until we could return at a later date and effect repairs of some sort.

As we rode home with the kindly farmer who picked us up, we agreed that it is foolish to attempt to drive to distant meets in an antique car, as they are just not dependable enough. We later heard that the meet was very successful, and I often wonder who won the prize that surely would have been mine, had we not been delayed.

AIR COOLED NEWS

PUBLICATION OF

THE H. H. FRANKLIN CLUB

VOL. IV, No. 3 DECEMBER 1956

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Editorial Office: Cumberland, Maryland

Our Club has not been bothered with one of the ever present headaches that dog the big clubs, whether club activities should be geared to the early cars or to the later ones. No matter how one of their runs is set up it brings howls of protest from one or the other groups, there seems to be no answer. The HHFC being concerned only with one make does not have to consider the matter of a car's age. They are all alike to us. That is they are all alike officially and in any planning of events, but the members vary greatly in their personal preferences. Our former editor is frankly a Classic man, the present one definitely turns to the more ancient carriages. Hubbard managed to maintain a fine balance in ACN, we are trying to do likewise.

In the field of Franklin history Hubbard devoted one whole issue, and a most excellent one, to pretty thoroughly covering the Classic era. We are taking that as our precedent in likewise devoting an issue to another age of Franklin. To many of us, and this editor is one, the round hood IS Franklin. There is probably no other design even the Renault, that is so firmly fixed in the public mind as being distinctively Franklin, despite the fact that numerous other cars of the period soon copied the round hood.

So we are picking out that interesting chapter as the theme of this issue. We feel it is particularly appropriate as this year marks the fiftieth since that phenomenal Transcontinental run by a barrel hooded 1906.

* * *

Probably the most valuable trait that an old car fancier can be endowed with is patience. He needs it in his negotiations for his car in the first place, again, if he is not to develop ulcers a fancy neurosis he must have it during the throes of restoration. Then, perhaps most of all, he must practice patience when the questions start. Most of us can just smile when the ordinary ones are proffered, "Mister, will it run?" (You have just driven up in full sight of the questioner!), "My, they certainly took good care of that one." (You have just finished three years work of restoration!), Then the more complimentary, "They don't make 'em like that anymore," to which there is always some local wit to add, "Thank, goodness for that."

Where patience gets its greatest trial is the knowing person who sooner or later remarks, "If this was such a fine car why don't they make them anymore." You have answered as well as you know how the many questions on your car and naturally being a bit proud of it you have been extolling its virtues. Every owner of a fine old car no longer produced is greeted with this question at one time or another. Here the Franklin man needs an extra injection of patience, for reasons that we have never been able to fathom, most people can understand why Pierce-Arrow, Marmon or perhaps Duesenberg failed to live through the Thirties, they seem able to grasp, though perhaps vaguely, the economic reasons that finished these cars. But Franklin, heck no! It was a different car so it must have a "different" reason for its final collapse, it couldn't possibly be as simple as the economics that wrecked Pierce and Peerless, it must have been "air cooling," that's it "air cooling," never was a success, no wonder Franklin failed!

Brother, you may as well quit trying and nurse your blood pressure. A famous man once said, referring to a question constantly put to him, "Those that ask the question could not understand the answer, those that could understand the answer would not have asked the question."

* * *

This hobby of ours has seemed to be one of the most completely satisfying avocations that could be found. It provides the unequalled joys of the hunt, no one of our car can ever again be quite as thrilling as the first moment we uncover it, but then comes the long, sometimes exasperating, but always interesting business of getting it back on its feet, and finally, something few other hobbies could provide, we can in the end literally, "ride our hobby."

It does, however, appear to us that we are ruining, or at least sadly restricting our hobby by the ridiculous prices we are paying, they have long since passed all reasonable sense of value. One well known collector when asked a couple of years ago how to determine the intrinsic value of an antique car, answered with the only final and positive statement we have yet seen, "have the car weighed, then check the current steel scrap prices, and you have your only sure value."

At a recent Pennsylvania auction several cars were sold at prices that we think passed all reason. We inspected four of these cars sometime prior to the auction. All were rough, all had parts missing and no one of them was in running condition, making restoration costs a mere wild guess. We would not have been willing to bid over one third of the price brought by any one of them.

These prices not only get noised about, but in the telling will grow abundantly, it is not hard to imagine the effect this is having. In the long run it will result in fewer cars being saved, for it will become impossible to buy even the veriest heap of trash without squandering thousands, which in turn means that only a few will be able to buy their way into this grandest of all hobbies. We have no solution to offer, we wish we did, all we can do is "view with alarm."

* * *

Membership is the base of all club activities. Our activities can expand and our magazine can be bettered only as our membership increases. During 1956 the number of new members was most gratifying, averaging better than two a week which, in an organization of our basic size, is considerable growth indeed. However, offsetting this was a disappointingly large number of dropouts so that the year's net gain was small. It appears, however, that our percentage of dropouts was in line with the experience of the larger clubs. In our club there were some possible reasons for this as we were quite belated with the last 1955 publication which no doubt caused some to withhold their renewals. This is possibly an explanation but emphatically not an excuse, a member's interest could not have been very deeprooted if his loyalty could not even withstand a bit of a delay. As against this faint hearted group were the real enthusiastic segment who continued to work wholeheartedly on the various chores that have to be done to maintain the club, many others of like kidney who were unable to render direct services aided financially.

We must have a continuing campaign for members so that each year will end with a good net gain despite the inevitable draining off of the "weak sisters." EVERY MEMBER GET A MEMBER has been so tiresomely drilled into the members of every ambitious organization that it no longer gets any action. Yet, think about it awhile. If some club members can devote hundreds of hours of unrecompensed time because of their interested determination to see the club grow and improve, are you such a fainthearted devotee that it is beyond you to add one lone new person to the rolls? Actually just about how much work and time would you have to devote to the objectives of bringing in ONE good member during the WHOLE year? Your arithmetic is as accurate as ours, if you do not have to be told of some of the things your club could do that are now impossible.

Well, what about it? Are you going to help this year or are you again just going to leave it up to a few of us to carry all the load?

NOW READ THIS: You will be billed direct from the Treasurer's office for your 1957 dues. Use the enclosed membership application to get YOUR NEW MEMBER for 1957.

* * *

We took over ACN with many misgivings, most of which proved well founded. Our first issue was badly printed and showed all the zip and sparkle of the Congressional Record. The second issue was much better printed and a bit more attractive but contained too many goofs and typographical errors, some wierd effects resulted from a few of these. Now we have a new publishing team and we believe that this issue will prove much better. We can only hope for this as it will not actually be printed until many weeks after this is written.—Ed.

Clayton Carris and John Burns Just Returned From the 1908 Glidden Tour

THE ROUND HOODS

In presenting this review of the round hooded Franklins of 1906 to 1910 it was decided to use the descriptions written by automotive writers of those days rather than to describe them through present day eyes. Obviously this approach brings with it some unavoidable repetition but, by and large, should result in a more readable article.

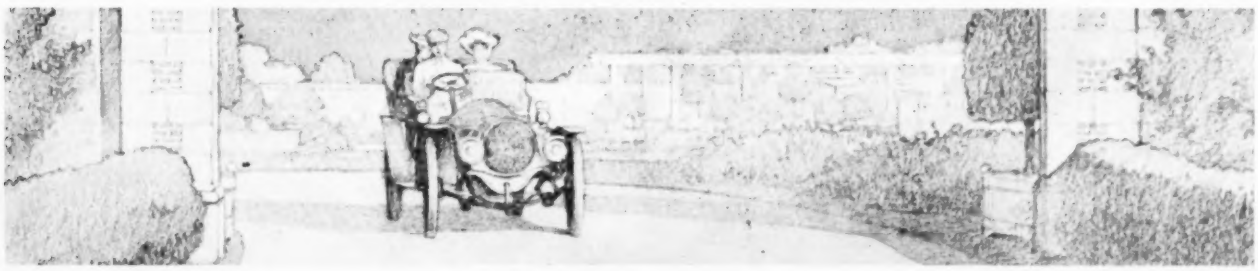
The following partial quotation from MOTOR WAY of April 12th, 1906, with its mixed criticism and praise should serve as a good introduction to the period, for again it is an appraisal of these cars made in their own day and not one in retrospect leavened by much acquired knoweldge of better ways and great advances.

"Perhaps the strongest argument that can be advanced in behalf of the principle of air cooling is the fact that, of all the cars now on the American market, the Franklin alone has, in its present form, been standard for four years. Even Duryea has been known to change in that time! . . . . The Franklin people may well claim that the man who has always been right may more safely be trusted to be right in the future. Wilkinson has probably been wrong less often than any of his contemporary designers not only in this country but in Europe. Of course it is to be presumed that even he has been wrong in some of his theories. As is well known, he turned out in 1904 a model, the cylinder dimensions of which were five inch bore by four inch stroke. For reasons best known to the makers, it was withdrawn from the market. But how many models, well known to the technical world but never heard of by the public, have been discarded after testing by such masters as the Marquis de Dion, Gottlieb Daimler and Emil Levassor. Not every time may the greatest artist produce a masterpiece.

Wilkinson's one mistake was fruitful, however, in that, in his efforts to carry air cooling to what might be termed an illogical conclusion, he discovered the auxiliary exhaust—the greatest stride that has been made in air cooling. . . . Like every device that enters into the construction of an automobile, the auxiliary exhaust check valve had to pass through a course of evolution before the proper form and method of operating it had been discovered. Then it was simple enough. The idea was not new. It had been incorporated in thousands of stationary gas engines. . . . The Franklin 4 by 4 motor will cool as well as any water cooled motor of the same dimensions. In all, the valves are in the cylinder heads and mechanically operated by the rocker arm combination. A single cam shaft on the left side carries the twelve cams—four each for the regular exhaust, the inlet and the auxiliary exhaust. Instead of the usual squared plunger with roller at the bottom to ride on the cam the Franklin designer uses the simpler round stem with flat disc at the lower end—not unlike an inverted valve. To be as frank in criticism as in praise, it is only fair to say that this cheaper form of valve operation has always seemed inexcusable in a car of this quality and price. It does not permit of correct cam design and thereby renders necessary the leaving of considerable play between the push rod and rocker arm when setting the valves, in order to obtain the best results in opening and closing. This play results in the "sewing machine" sound which is characteristic of every Franklin car. When the Franklin was young and its competitors mostly crudely made, this sound was so much less than the noises common to other cars it was excusable. But we are accustomed to more accurate methods nowadays. . . . Doubtless the designer has very good reasons for retaining this device. . . . But the concensus of expert opinion is evidently against Wilkinson in this.

On the other hand, to show that the majority may not always be right, the success of the ash wood frame of the Franklin might be cited. The wood frame has so many virtues to recommend it, one wonders it is not universally adopted.

It has been a feature of this machine from the first and the writer has never heard of a case where it "fell down. . . ."



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Four models, one runabout and three touring cars, constitute the 1906 line of Franklin air-cooled cars, manufactured by the H. H. Franklin Manufacturing Co., of Syracuse, N. Y. All have vertical air-cooled motors embodying the same mechanical features; three will have four cylinders and one a six-cylinder motor. All will have ash wood frames and full elliptic springs. Following are brief descriptions of the main features of each car:

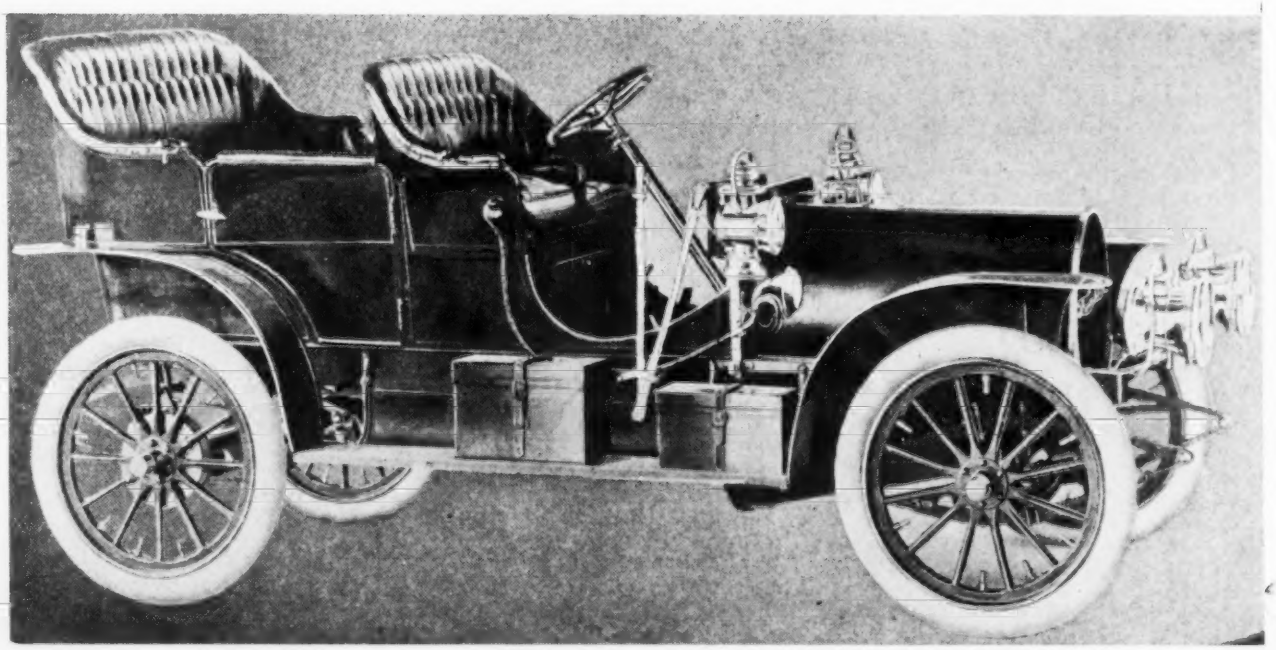
Type G is a light touring car equipped with 12 horsepower motor similar to the motor used in the runabout, but set longitudinally under a long, low, semi-cylindrical hood, with circular opening in front; this hood is a characteristic feature of the three larger Franklin cars and is readily recognized. The body is of the side entrance type and is designed to carry four passengers; the side doors open forward. Drive from the engine is through a multiple disc clutch with metal-to-metal friction surfaces, three-speed sliding gear transmission, propeller shaft and bevel gears to the live rear axle, the latter running in ball bearings of the so-called Mercedes type. The flywheel is cast with fan-vanes in lieu of spokes and acts as an exhausting fan, drawing the hot air away from the motor. Ball bearings, of the same type as those used in the rear axle, are fitted to all the transmission gear shaft bearings. The transmission gearcase is of aluminum and is provided with a large removable top plate. Nickel steel having a tensile strength of from 108,000 pounds to 136,000 pounds to the square inch is used for the transmission gears and shafts. Nickel steel is also used for steering knuckles and yokes and the propeller shaft, the latter being subjected to special treatment to give toughness. The bevel driving gears run in an oil-tight casing; both ball bearings and babbit bushings are used in the bevel gearcase, the bushings being made by a special process at the Franklin factory. Balls are used for the outside or wheel bearings. The full elliptic springs are all 36 inches long; wheels are 28 inches in diameter, with 3½-inch tires; double-acting brakes are placed on the rear hubs and operated by a hand lever, and another brake, also double-acting, is placed on the drive shaft and operated by a pedal; wheelbase 88 inches and tread standard; steering gear is irreversible; body of aluminum on angle steel framing; hood of aluminum and can be tilted back or removed entirely; weight of car about 1,300 pounds.

Type D is practically a duplicate of Type G, on a larger scale; the motor has four cylinders of 4 inches bore and 4 inches stroke, and is rated at 20 horsepower; the drive, bearings, transmission, brakes, steering gear, body (both in shape and in construction) are similar to those parts of the 12-horsepower car. There is, however, ample room for five passengers; wheelbase is 100 inches; wheels are 32 inches in diameter and tires 3½ inches; springs are 40 inches long. The flywheel is used as a suction fan, as in the smaller touring car; and in addition to this there is a gear-driven fan in front. So far as outside appearance is concerned, the two machines are practically identical in size.

The largest of the 1906 Franklin cars, Type H, is a 30-horsepower touring car with six cylinders, the cylinders being of the same dimensions as those of the 20-horsepower car—4 inches bore and 4 inches stroke. There is a general resemblance between the 30-horsepower car and the smaller touring cars, but Type H is larger in every way; the wheelbase is 114 inches, the six cylinders of the motor make a very long hood necessary, and the entire car has a long and low-hung appearance. The wheels are 34 inches in diameter with 4-inch tires. The machine weighs 2,400 pounds and its maximum speed is given as about fifty miles an hour. The cooling arrangements are the same as in the 20-horsepower touring car—a flywheel fan and a gear-driven fan in front.

The motors of the Franklin cars are exactly alike in constructional details, the only differences being in cylinder di nensions and the number of cylinders used; therefore a description of one will answer for all.

A glance at the line engravings showing the engine in section will make the more important details clear. Deep, thin flanges are cast integral with the cylinders and extend from the top to a point considerably below the top of the piston when at the lowest point in its stroke. The usual inlet and exhaust valves, mechanically operated through rocker arms, open directly through the cylinder head; and, in addition, there is an auxiliary exhaust valve, operated by its own cam on the single camshaft used. A port, uncovered by the piston at the bottom of its stroke, permits the exhaust gases to pass out at the end of the exhaust stroke when the valve is held wide open by its cam. During the suction stroke, however, the valve is



closed, so that exhaust gases are not drawn back into the cylinder as they would be if there was no valve in the outlet passage. Much of the exhaust is carried out through the auxiliary valve, freeing the ordinary exhaust valve from a large percentage of the heat to which it would otherwise be subjected, and at the same time giving a very free outlet for the exhaust. One of the effects of the auxiliary exhaust valve is to assist in keeping the cylinder head cool; and another result is that carbon deposits are carried away through the lower passage instead of collecting in the combustion chamber and fouling the spark plugs. The auxiliary exhaust passages, in fact, require cleaning about every thousand miles to remove the deposits that gather there. The auxiliary exhausts discharge into their own exhaust pipe leading to the muffler, the upper exhaust valves having another pipe. The valves in the cylinder head are made as large as the diameter of the head will permit, and are placed in housings which can be removed, with valve in place, by removing the holding-down bolts. The housings are flanged for cooling, and are arranged to carry the gases over the head instead of through it, as was the cast last year.

The crankcase is of aluminum and is made the same as last year, with large cover plates on one side, so that inspection of the cranks and connecting rods is easy, and with the end plaes, containing the main crankshaft bearings, bolted on. The front end plate has an integrally cast housing in which the camshaft gears and the governor are placed, well protected from dirt and damage and thoroughly lubricated. The main bearings are bushed with the special babbit made at the Franklin factory.

The flywheel, at the rear end of the motor, is so formed as to completely house the clutch; the relative positions of these parts are shown in the line engraving. Alternate plates of phosphor bronze and tempered steel form the friction surfaces, and the whole runs in a bath of oil. The manufacturers anticipate that this clutch will run for at least an entire season without attention; and if wear occurs it can be readily taken up by inserting additional plates.

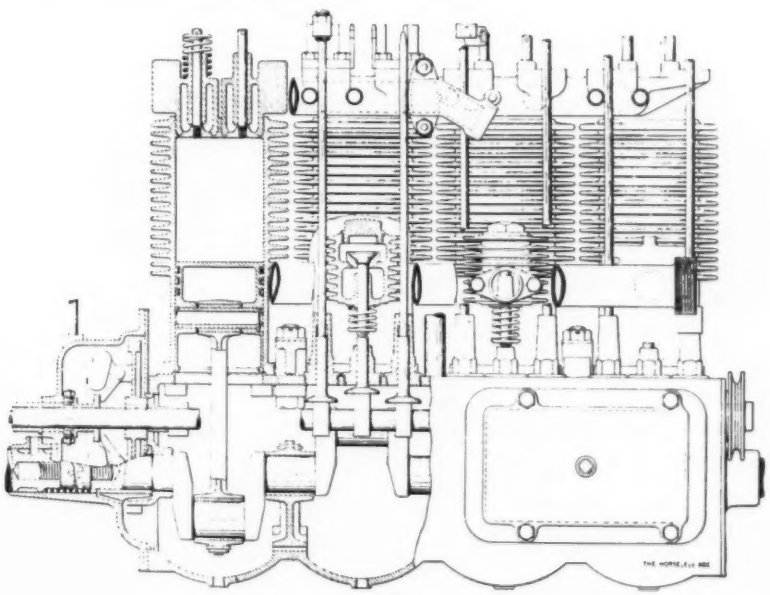
The babbit bushings and other parts freely used about the Franklin cars are made by a die-casting process. Metal dies are used and the castings made under pressure, the result being a hard, smooth surface requiring no machining, and, the manufacturers state, giving great wear-resisting and anti-friction qualities. The metal dies chill the surface of the babbit, increasing its hardness.

Ignition is by jump spark, there being four coils on the dashboard; batteries supply the current. The timer is of the roller type and is attached directly to the end of the camshaft.

The Franklin motor remains substantially as it was in 1905, and the runabout is unchanged in general design except that the change speed lever is placed inside the line of the frame and in front of the driver, instead of being outside, at the end of the seat. The 12-horsepower touring car is entirely different from the 1905 touring car of the same horsepower. The 20-horsepower car is changed only in detail. The big six-cylinder car is a new machine and the youngest of the Franklin productions. All are well finished, fine looking cars, comfortable to ride in and with an abundance of power in proportion to weight.

1907

The 1907 line of Franklin models shows no distinctive change in the principal features of the cars, but many minor changes to improve the easy riding qualities have been incorporated. The new line will include four models, known respectively as types G, D, H and type G runabout, the latter being the same as the type G touring car except for the body. This runabout is succeeding the former chain driven runabout with the four cylinder motor set crosswise under the hood. which has been eliminated entirely. Changes in the motor construction have been few and slight, and we therefore deem it advisable to mention only the more important ones.



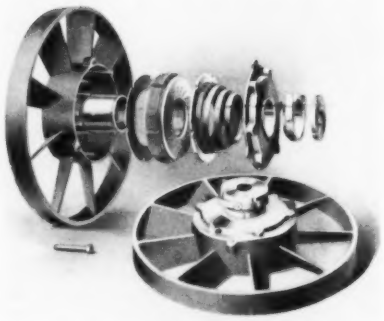
Sectional View 1906 Engine

Carbureter—The carbureter is of the float feed type. The gasoline enters at the lowest point, passing through a strainer in a small chamber, the bottom of which may be removed for cleaning. It then proceeds upward through a ball valve on the lower end of the float spindle and then into the float chamber. From here it passes by a needle valve, and upward from a horizontal passage through the nozzle which is provided with small spray openings. The needle valve may be adjusted from the dash by means of a small handle connected to it by universal joints. Air is admitted through the lower passage and a suction lifting valve and passes by the spray nozzle where it vaporizes the gasoline coming by the needle valve. The amount of air and vapor going to the motor is controlled by a throttle valve which is connected to the governor. As the throttle valve is open a by-pass valve also opens so that extra air may be furnished the mixture, and the more the throttle valve is opened the more the by-pass valve opens, letting in more air and properly diluting the mixture as the motor speeds up.

Gear and Brake Levers—The size of the emergency brakes have been increased materially and the gear shifting and emergency brake levers have also been altered. They are fitted with hand grip releasing levers on the side toward the operator. The brake lever controls contracting fibre faced steel bands working on malleable iron drums fastened to the rear wheel. The feature in the gear shifting lever consists in the rounding of certain corners in the notched sector, making it possible to move the lever continuously from neutral to the intermediate speeds, or from reverse through low without touching the hand release.

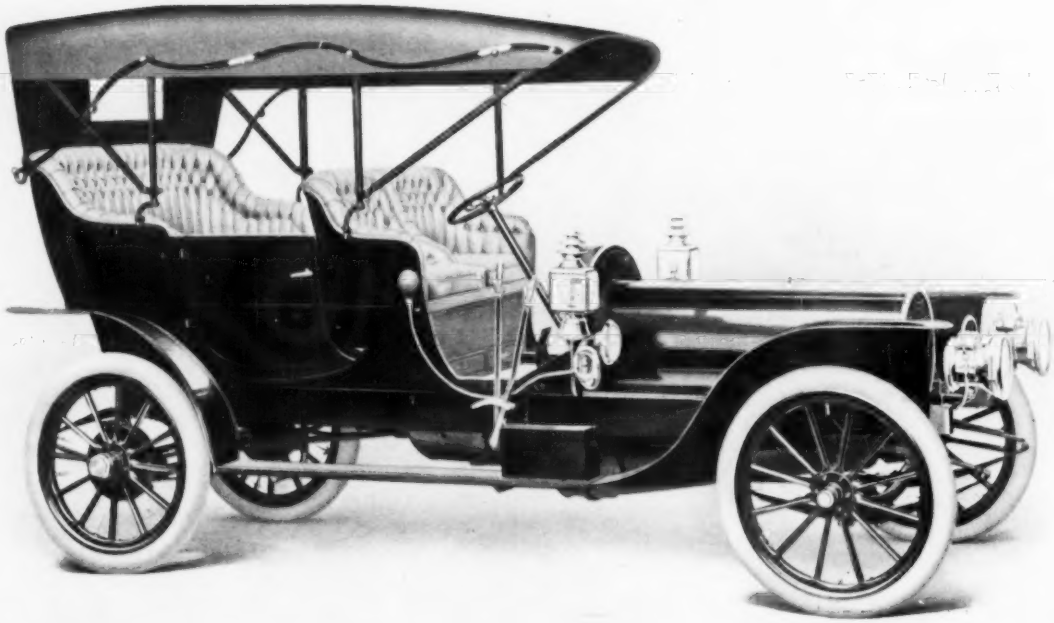
Transmission—All 1907 cars are shaft driven. The change gears are contained in an aluminum case located directly underneath the toe board of the driver's seat, where it is easy of access. Shafts and gears are made of nickel steel and operate in oil. The rear axle is of the live floating type fitted throughout with ball bearings and so designed that the load of the rear wheels is not carried on the driving axle but on an extension of the main tube. The bevel driving pinion is well supported in long bearings and like the bevel driven gear is made of nickel steel forging.

Clutch—The 1907 clutch is similar to that of 1906, being of the multiple disc type. The discs are made of steel and phosphor bronze alternated. The phosphor bronze discs are prevented from rotating in the flywheel by bolts, but are free to move laterally. The steel discs are carried on the clutch driver on which they are free to move laterally and with which they must rotate. The clutch driver is connected direct to the transmission shaft by means of a universal joint. A large flat spiral spring holds the plates firmly against each other when the clutch is engaged. Under ordinary conditions, when the flywheel revolves the clutch driver also rotates because of the friction exerted upon the discs by the spring. The motion of the clutch driver is communicated to the transmission by the driving block, as before stated. In order to throw out the clutch a foot lever is pressed forward which moves the clutch shifting lever backward, carrying with it the clutch shifter trunnion which runs upon the clutch driver. As the latter moves backward it brings with it the ball thrust compressing the spring and relieving the pressure upon the discs, which, being free to move laterally, separate, the oil from the oil bath in which the clutch runs immediately filling the spaces between the discs.

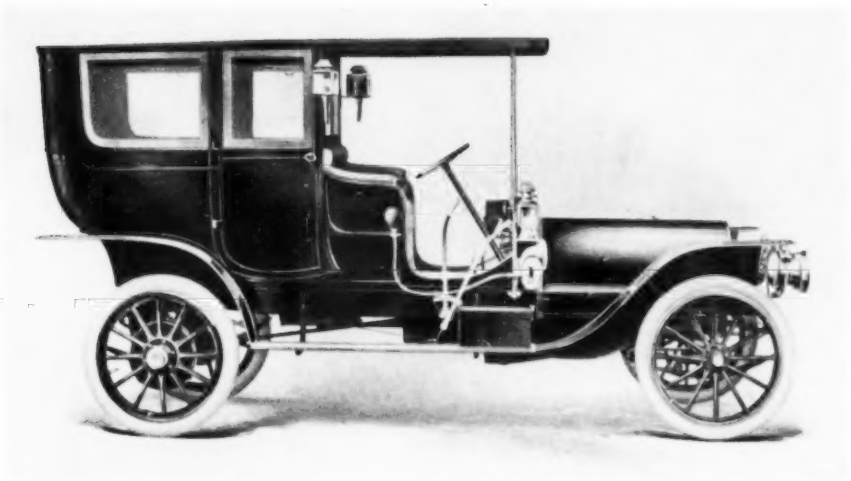


The Disc Clutch Disassembled

General—Type G is of 12 H. P. with a wheel base of 90 inches, the runabout weighing approximately 1,200 and the touring car 1,400 pounds. The wheel base of type D measures 105 inches, it being of 20 H. P. and weighing 1,900 pounds. Type H, the 30 H. P. six-cylinder touring car with a wheel base of 120 inches weighs 2,200 pounds. Distinctive features, such as the auxiliary exhaust, the laminated wood sills, and full elliptical springs have been retained, but the bodies are made more spacious and of pleasing design. The dash design has been changed on Models D and H, and the oiler has been removed from the dash on all cars. Larger wheels are being used to give increased road clearance, and a tool box in which can be stored a large amount of special equipment, extra tubes, oil, etc., is carried underneath the front seat. Tool drawers are also placed forward underneath the front seat for carrying the regular repair equipment.



Type H Touring-Car



1908

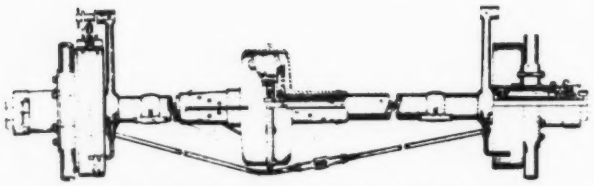
While the Franklin models for 1908 probably embody more distinctive new features than have come to light on any of the new models thus far uncovered, their makers, the H. H. Franklin Manufacturing Company, Syracuse, N. Y., lay particular stress in their announcement on the fact that the new Franklin has more power. Through refinement, perfection in construction and a slight increase in size, the motor formerly rated at 20 horsepower has been constructed to give an actual output of 28 horsepower on the brake, and of the factors leading up to this result the increase in size has doubtless had the least influence. While still retaining the basic principles that have always distinguished the Franklin motor, its designers, through a process of evolution, have succeeded in bringing out something entirely new, and something that is, moreover, in direct accord with engineering principles calculated to produce the very highest efficiency in an internal combustion motor.

In place of the former cylinder construction, a dome-shaped head has been substituted, this semi-spherical form being considered ideal for the internal combustion engine, for the reason that a sphere exposes the least surface for any particular volume—in other words, a minimum amount of surface for a maximum volume—and thus there is less of the interior of the cylinder exposed to the direct heat of the exploded charge, and the efficiency of the engine is increased. A further advantage is obtained in that the fresh charge may be introduced directly into the cylinder, and thus be kept at a much lower temperature than is otherwise the case. To accomplish this, the intake and exhaust valves have been constructed with a common center and are made concentric, thus permitting of the utilization of a greater valve area, and making possible the induction and expulsion of larger quantities of gas through the former type of separately constructed valves, which limited their size to one-half that which can be secured by this new method of construction. The horsepower was consequently restricted, as the limitations of the valve made it impossible to secure the highest degree of efficiency available from a given size of cylinder, while this construction tends to bring about this long-sought result. It also adds to the cooling ability of the motor by insulating the exhaust valve from the cylinder, the burnt gases being discharged through the central valve, while the fresh charge is inspired through the large intake valve surrounding the exhaust.

Transmission, Type D

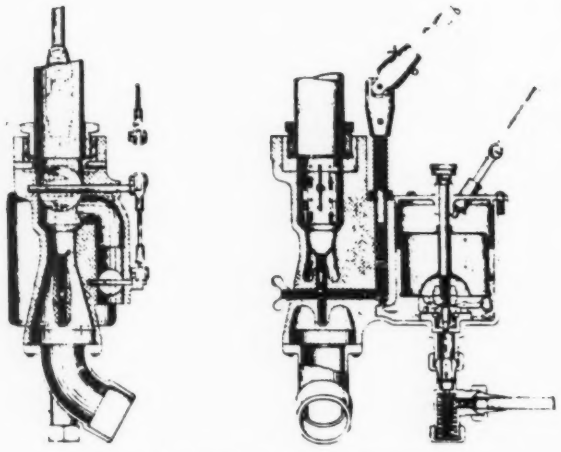
The method of valve operation employed on the 1907 models has, however, been retained, the rods being actuated through the medium of a set of hyperbolical-shaped cams on the single camshaft. The design is such that the movement of the valve lifter has been reduced to a minimum and with the aid of the perfected shape of the cam this otherwise more or less noisy part of the motor has been effectually silenced. Nor has any change whatever been made in the design or construction of the auxiliary exhaust system, which has long been a distinctive characteristic of the Franklin, though, as a result of extensive experimenting with the aid of a Schulze manograph, it has been found that the back pressure upon the piston has been reduced to a maximum of two pounds through the use of the auxiliary exhaust. The Franklin designers were always confident that this reduction was a substantial one, but it was not until the establishment of the laboratory at the Franklin plant that they were able to verify it, or state the amount definitely.

Another feature of the Franklin motor, the origin of which, however, dates back to several months ago, is the use of oil baffle-plates over the open end of each cylinder, and through which the connecting rod operates in a transverse slot. This compels the splashing of the lubricant in the crankcase exactly where it is most needed—the working side of the piston—and likewise prevents its being thrown about indiscriminately on the working parts, thus giving more uniform and efficient lubrication with the same quantity of oil as formerly employed. In planning the motors of the 1908 models, considerable experimenting was carried out in order to ascertain the heat-conducting value of various different metals, with the result that phosphor bronze of a high plastic limit is found to be very much superior to other metals or alloys for this purpose. In consequence, it has been decided to cast the cylinders of the 28-horsepower Type



REAR AXLE UNIT OF FRANKLIN MODEL D.

D, plain and equip them subsequently with flanges made of this material, shrunk on by a process which causes them to bind tighter as the cylinder becomes heated, thus increasing their radiating capacity. The cylinders are not uniformly equipped in this respect, but the number of flanges is varied according to the position of the cylinder as regards the cooling fan. In accordance with this plan, the cylinder receiving the smallest volume of cooling air from the fan is provided with largest number of flanges, the placing of the latter being so calculated that the temperature of each cylinder will remain uniform under load. The cooling fans, both front and rear, have been so designed and so arranged as to increase their cooling power to the maximum for their size, with a minimum expenditure of energy to drive them, the forward fan now being gear-driven, while the rear one, embodied in the flywheel, serves to cool the engine base.

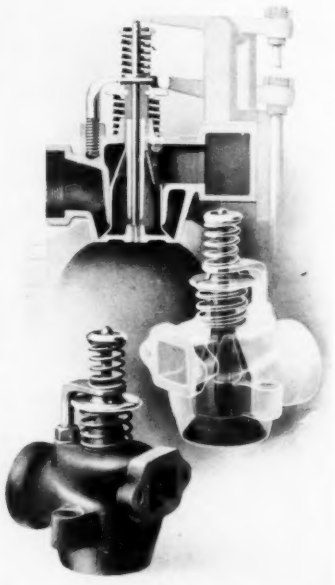


END AND SIDE VIEWS OF FRANKLIN CARBURETER.

Various changes have been made in the design of the carbureter of the Type D car, including improvements in the jet, float and shape of the mixing chamber, the last-named now being in the form of a Venturi tube, thus securing the maximum effect from the velocity of the air going by the jet. The latter is of the multiple type, and is shaped somewhat similar to the chandelier, allowing the air to mix more thoroughly with the gasoline spray as it leaves the nozzle. A regulation Longuemare type of float is employed, this being designed so that the float level may be readily changed by turning two screws in the float-valve stem, and is noted for its stability on rough roads. Warm air is transmitted to the carbureter by a new method consisting of a heat collector encircling the exhaust pipe, and which conveys the heat thus accumulated through a pipe running around beneath the engine base.

Not the least important change in the new Franklin is to be found in the ignition, and here the chief addition has been the adoption of a Bosch high-tension magneto as one side of a duplicate system of ignition. For the other side, the regulation high-tension accumulator and coil outfit has been retained, the timer, however, being of special construction exclusive to these makers, and on which patents have recently been granted. It is of the roller contact type, but the contact blocks and rollers have been made from chrome nickel-steel and the pins from Tungsten drill rod, all of which are so shaped and hardened that little or no wear ensues from long service, and it has consequently been found possible to obviate any provision for adjustment.

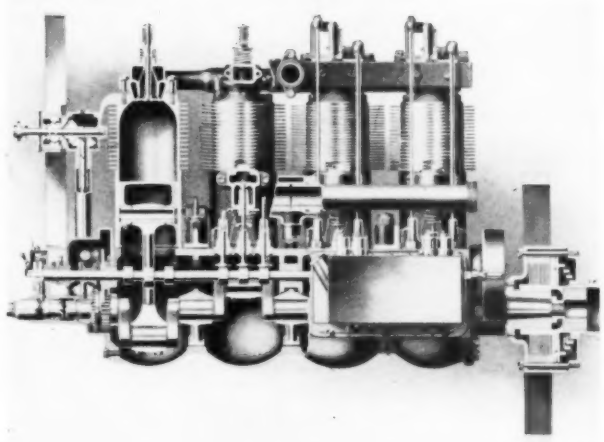
The essential of lubrication is taken care of by a gear-driven oiler, instead of the belt drive formerly used and which is now bolted directly to the engine, thus making its operation much more positive and uniform than was possible with a belt drive. For the greater part, the lubrication system remains unchanged, but detailed improvements have been carried out as the result of past years' experience, so that the makers now feel confident that it repre-represents as close an approach as possible to being trouble-proof.



Three views of concentric valve with dome-head cylinder

Where the transmission is concerned, the same style of clutch as employed in the previous model has been retained, its operation proving so satisfactory that no change whatever has been made in it. It is of the multiple-disk type, phosphor bronze and steel disks alternating, these two materials being found to give a maximum coefficient of friction without any objectionable sticking qualities. Running in oil, as it does, such a clutch is not only very durable, but extremely easy in operation and free from trouble. The chief change to be found in the transmission is in the shape of an entirely new gearset, which is of the selective type and is characterized by a simple and effective method of shifting that eliminates the familiar H sector for the lever. Whenever the lever is brought to a vertical position it is automatically set into the neutral position by means of a spring tension. To go into first or low, from this, it is only necessary to slightly press outward on the lever and back. For reverse, the operation is similar, except that the lever is pushed forward to go into mesh instead of being pulled back. For intermediate, the lever is pressed inward slightly and pushed forward, and for the high-speed or direct drive, pulled back. The gear-lock and lever are integral, operating through a single pawl on the change gear-shaft by means of two teeth cut on one segment forming part of the trunnion. For each charge, the spring tension is such as to bring the lever into neutral when shifting toward it, thus facilitating the operation of gear-changing. A new universal block joint has been added in the drive, which by reason of its design and construction is such as to minimize wear and prevent any lost motion, and a new dust-proof oiler is also a feature of the driving shaft.

The frame is of the special Franklin construction that has always characterized this car, being made of oak sills and carried on 40-inch full-elliptic springs, front and rear. The front mudguards have been stiffened to prevent undue vibration, and the running boards have been lowered 1½ inches. In spite of the increase of 40 per cent in the power of the motor, the total weight of the car has been kept down to the same limit as in the 1907 model by a careful selection of materials, which constitutes a further guarantee that the tire bills on the new car will still be kept down to the same low level as has always characterized the Franklin in this important respect. Taken all in all, the new car is a typical Franklin product—the result of long study and close application to the evolution of a system which has proved unusually successful, as is evident from the great number of these cars in daily use all over the country. It may well be termed the evolution of an idea, as the Franklin cars have all been built round the principle of air-cooling, of which the auxiliary exhaust is the mainstay.



1909

Franklin cars for 1909 represent the culmination of six years of steady development, beginning in 1902 with a 7-horsepower runabout, which was the first air-cooled car to be placed on the market in this country. It certainly seems a far cry from the crude little machine of that time to the Franklin cars of the present day, but it was with that as a basis that the Franklin of 1909 have been developed, as the original principles which were embodied in this prototype of the air-cooled car in this country are still retained in the 1909 models, many of the features of which differ from those of its early predecessor merely in detailed refinement. Each succeeding year has not only marked improvement in the Franklin cars, but also has seen additions to the Franklin line, the present year being no exception. It now comprises two-seated runabouts equipped with hampers, or with single or double rumble seats, touring cars having a capacity of four, five or seven passengers, and closed cars of all types, such as broughams, landaulets, limousines, town cars and motor cabs.

Smallest Franklin Is Now 18 Horsepower

In past years the Franklin company has been turning out a very successful small car with an air-cooled motor rated at 12-horsepower, but for 1909 the smallest car which they will turn out will be known as Model G and will be rated at 18-horsepower. It has a four-cylinder air-cooled motor, the cylinder dimensions of which are 3⅜ by 4 inches. It is built on lines similar to the 28 and 42-horsepower motors, except that it is smaller and is a slower-running motor. With its added power and slightly reduced weight, Model G forms an extremely satisfactory four-passenger car, and really places it in a class by itself, when its price, passenger capacity and power are considered in the light of its capabilities.

Among the improvements made in this smallest representative of the Franklin family since the appearance of the 1908 models a year ago, probably the most apparent improvement is the use of 32-inch wheels instead of the 30-inch size formerly employed, this serving to increase the wheelbase by 1½ inches. Another change of note where the power-plant is concerned is the adoption of a Bosch high-tension magneto as the only means of ignition, in connection with a fixed point of firing. The increase in the wheelbase has also made an extension of the body possible, thus adding to the comfort and appearance of the car. In its fittings and appointments the standard body is somewhat similar to that used last season. But this model is also built with a brougham body, making it a very serviceable vehicle for a doctor, or wherever a two-passenger closed vehicle is desired. It will also be furnished with a landaulet body similar in design to that used on the 28-horsepower car, but smaller in proportion. These bodies are built by recognized leaders in this line of work and are finely finished. The touring car, landaulet and brougham will be finished in royal blue and the runabouts with a red body and black running gear.

At the other end of the four-cylinder line of Franklins is Type D, a 28-horsepower car, which is the largest four-cylinder car turned out by the Franklin company. Its motor dimensions are 4¼ by 4 inches, and it is also equipped with a Bosch high-tension magneto as the sole source of ignition. As is the case with the smaller cars described, one of the most important changes where Type D is concerned is the adoption of 36-inch wheels instead of the 34-inch size employed during the past season. This gives a much better clearance, makes the car easier riding and adds to the life of the tire equipment, while also giving the car a much better appearance than with the smaller wheels. When built with a landaulet body, however, the 32-inch size wheels are employed, in order to make entrance to the car easier. In touring car and runabout styles this car is equipped with bodies patterned after the lines of the six-cylinder models, except that they are lighter and smaller to conform with the lesser horsepower of the motor.

The six-cylinder model of the Franklin line, which is known as Type H, is built in three different styles. First, as a seven-passenger touring car; second, a single or double rumble seat runabout, and third, as a seven-passenger limousine. This is the highest-powered Franklin car built and is rated at 42-horsepower. One of its features is a steering mechanism of the worm-gear type, which is made by the Franklin company in its own shops. Its design is such as to prevent any lost motion, which is of vital importance, besides being extremely easy to handle. Type H has a 127-inch wheelbase, which admits of a roomy and well-designed body, the extra seats being of the folding or Pullman reversible type, so arranged as to be readily removed, or closed up against the side of the body out of the way. For its power, this is undoubtedly one of the lightest cars on the market, tipping the scales, as it does, at less than 2,500 pounds, though listed at the latter figure.

With the new engine construction the front cheek-piece can be removed without disturbing the camshaft, or the camshaft may be taken out without interfering with the cheek-piece. The starting crank in its attachment to the crankshaft has been made waterproof, and is held in place by a leather stirrup. The concentric valve and dome head cylinders are two features used exclusively on the Franklin motors, and while having made their appearance on the 1908 models, have after a season's use shown themselves so important in the perfect working of the Franklin motor as to entitle them to be incorporated as features of the 1909 models without any changes.

The intake and exhaust valves are concentric, or, in other words, have the same center and take up the same space so far as using the top of the cylinder is concerned. This method of construction makes possible the using of valves having twice the areas as where separate intake and exhaust valves are used. This form of valve and the dome-head cylinder fit each other, naturally leaving no corner for dead gases to lurk in, thus making the exhaust more complete, and therefore leaving greater room for a fresh charge. The area of the cylinder's inner surface through its shape is reduced, while the external or heat radiating surface remains the same. Therefore with this construction the cylinders are cooled quicker and more thoroughly than where the smaller valve and flat-top cylinders are used. Other advantages of the concentric valve and the dome-head cylinder are that the opening from the suction pipe to the cylinder is more direct. A greater amount of gas can therefore enter because of the decreased friction in the passage. The suction valve is also kept cooler by its not coming into direct contact with the cylinder head. Therefore, the gas expands less on entering the cylinder and a more concentrated charge can enter. There is less loss of heat in the cylinder, the heat expressing itself more completely in power. It also increases cooling ability by adding to the external surface of the cylinder and decreasing the internal surface. These large and small advantages of the concentric valve and dome-head cylinder are found to be effective at all speeds, but particularly at high speed on hard climbs or whenever the engine is taxed to its utmost.

The method of suspending the Type H engine is somewhat different from that used during the past season, the cross rails being made of angle steel, which also supports the magneto and oiler in a manner greatly reducing vibration and making removal or adjustment easy. A double heat accumulator, which is the method of securing warm air for the carbureter, is a new feature on the six-cylinder motor. This is accomplished by encircling the auxiliary pipe with a copper jacket and passing the heat so accumulated through the air intake pipe underneath the engine base to the carbureter. The copper case used on this motor is in addition to the regular steel warm-air collector used on all of the other Franklin engines. With the adoption of this device a considerable increase in the carbureter efficiency has been brought about by the perfect mixing of warm air in such volume as may be required by the varying conditions.

A change in the style of the oiler and method of carrying is such as would seem to add considerably to the convenience of filling the oiler. The Hancock positive gear-driven oiler of various feeds, depending on the size of the engine, is used on all models, being placed directly against the engine base where the oil is, through the warmth expelled from the engine, kept at all times in the proper condition for the most satisfactory lubrication. All the 1909 engines are equipped with a transverse slotted oil baffle plate, used in connection with the splash system of oiling, the pistons in their action forming a suction or natural pump drawing up the oil, and spraying it directly on the points required, causing a more even lubrication than through the ordinary splash system, which distributes the oil without regard to the exact points requiring lubrication and depending upon the operation of the engine for working the oil around.

The discarding of the timer has made possible several changes and the elimination of parts which slightly reduces the engine's weight, and naturally simplifies the ignition system, entirely eliminating, as it does, the possibility of timer troubles. This system was used on two of the Franklin cars in the A. A. A. tour and gave such perfect satisfaction as to merit its adoption on all of the 1909 models.

Franklin Model G Brougham

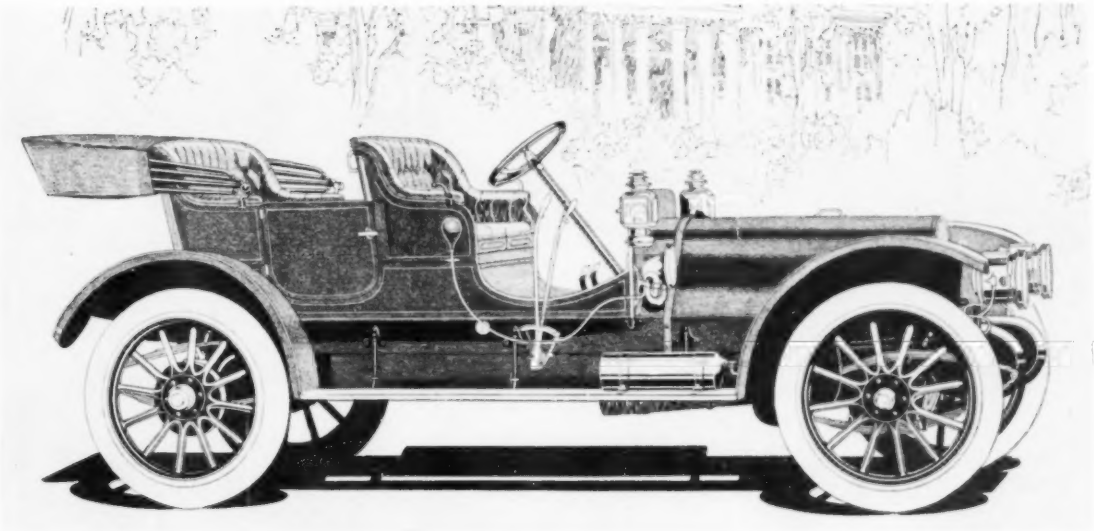
The auxiliary exhaust is an exclusive feature on the Franklin, which, through its unique construction and position, these valves being at the base of the cylinder, dispel 71 per cent of the burnt gases immediately on the completion of the power stroke, the remaining 29 per cent passing out through the main exhaust, which, not being connected with the muffler, makes back pressure impossible and thus obviates the necessity of a muffler cut-off. These valves are mechanically operated by the camshaft in a similar manner to the regular exhaust valve.

The clutch is of the Franklin multiple disc type, the discs being made of phosphor bronze and steel alternated. The phosphor bronze discs are prevented from rotating by bolts, but are free to move laterally by friction gradually exerted through a spring. The discs are thus made to revolve, and, pressing out the oil, are brought into action without grabbing.

Two styles of change gear lever arrangement are used on the coming season's models, the selective type being used on all models except the 18-horsepower Model G, these being equipped with the self-finding gear shift. The selective type is so constructed as to be entirely free from lost motion, and is positive in its action. The lever is held in vertical position by spring tension. The absence of the H-guiding plate used as a rule on the selective type transmission is noticeable. Operation between change gear lever and transmission is direct, all intermediate complications being entirely done away with. Through the arrangement of gears and operating levers it is possible to pass from one gear into another without disengaging the clutch.

Editor's Note: The above statement on changing gears is correct. We once won a bet with a Model G Runabout by driving eleven miles through the mountains with our left foot on the dashboard and both hands in our pockets.

1910



Catering to every need with a wide range of powers, values and bodies, the Franklin line for 1910 is unusually complete, comprising no less than 16 body forms on three separate and distinct chassis. With this universal line of cars, the makers, H. H. Franklin Mfg. Co., Syracuse, N. Y., expect to tax the capacity of the present immense factory to its utmost. To prepare for this widespread demand, the commercial cars have been segrated, and a separate factory obtained for their construction.

As has been the case in the season of 1909, the touring car is made in three models, the largest being a seven-passenger car of 42-horsepower, known as Model H, and the smallest a four-passenger car of 18-horsepower, designated as Model G. Intermediate in size and power is a five-passenger car of 28-horsepower, which is known as Model D. Model H has a six-cylinder and the other models a four-cylinder engine.

A change in construction is noted in the introduction of the car with the close-coupled body, or miniature tonneau, in the 42 and 28-horsepower classes. These close-coupled cars take the place to a considerable extent of last year's runabouts of the same size and power built with a double-rumble seat. The runabout type with a double-rumble seat, however, is retained in both of these models, and in the lowest powered class there is a retention of the runabout in three forms to the exclusion of the more popular close-coupled car, as in the higher powered models.

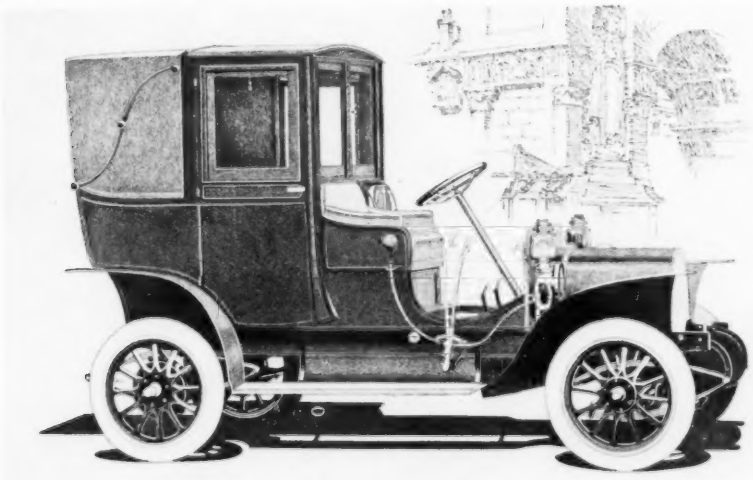
Closed cars appear in six forms, in the largest class being a seven-passenger limousine of 42-horsepower. In this intermediate class are another limousine, having 28-horsepower and carrying six passengers, and a six-passenger landaulet of like power.

Three closed cars are classed by themselves and not among the regular H, D and G models. They are all known as Model K, and each is driven by an 18-horsepower engine. They are a limousine, town car and taxicab, the two former providing respectively for six people and the latter for five. Both town car and taxicab have auxiliary folding seats. The driver's seat in the taxicab is single and the space beside it is large enough to be used for carrying baggage.

Most Noticeable Changes Made in Cooling Method—The changes most noticeable shown in the 1910 models are in the engine, but they are changes that are greater in appearance than in fact. Air-cooled like all its Franklin predecessors, the engine shows a new method of applying to the cylinders the cooling air current. Heretofore each of the cylinders has been encircled by a series of horizontal metal flanges of phosphor bronze shrunk onto the exterior wall. The same idea is carried out in the 1910 motor, but with this difference, that the flanges are vertical instead of horizontal, steel instead of bronze, and are cast into the cylinder instead of being shrunk on.

This makes possible the improvement in the way the current of cooling air is made to envelop the cylinders. In the previous engine the current of air taken from the front of the hood was sent back upon the cylinders by a gear-driven fan. This fan is eliminated now.

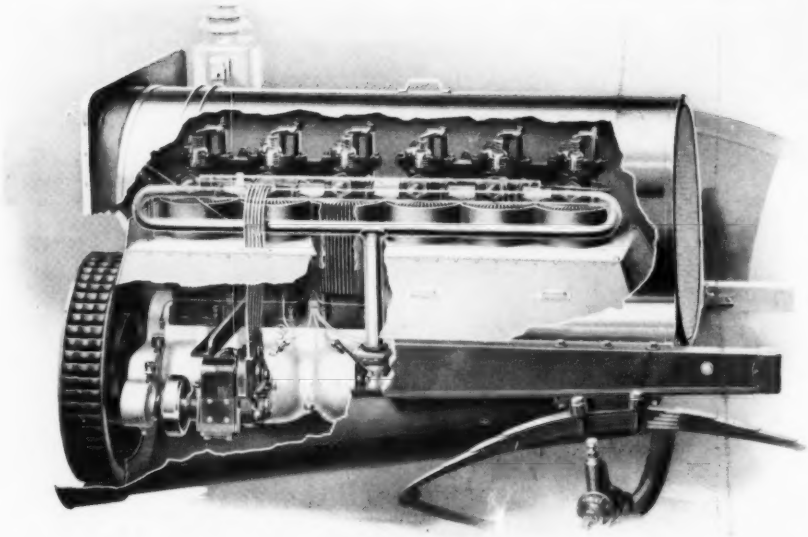
In the 1910 engine each cylinder, with its vertical flanges, is encased in a cylindrical sleeve of sheet metal, and through the tunnel-like opening thus formed, there is drawn from top to bottom a strong current of air by a suction flywheel at the rear of the engine. In order that the necessary suction may be affected, the entire engine base is given a housing of sheet metal. The top of this forms a deck



Franklin Taxicab

extending from the cylinders to the side members of the frame. This with the pan below the engine forms a chamber in which the air pressure is kept less than atmospheric by the flywheel, and thus is produced the partial vacuum necessary to the induction of the air current from above and down the cylinders.

Powerful New Fan Creates Small Vacuum—This suction fan with its contributary devices creates a current of air far more powerful than that applied in previous engines. Increasing the amount of cooling air about the cylinders and doing it with less power, it increases both the cooling efficiency and the motor efficiency. Each cylinder, regardless of its distance from the opening in the front of the hood, is provided with an equal current of air, of equal temperature, and is equally cooled.



Fan capacity is many times the capacity of the total area around the cylinders, assuring an equal distribution of the air. The air currents are fully controlled and accurately directed to those parts of the engine where they are most needed. Entering at the top, the air, while it is coolest, immediately strikes the valves and the hottest parts giving them a maximum of cooling effect.

Cylinders are cast separately, and each is equipped with the same number of flanges or fins. With the previous method of construction the number of fins was increased as the distance of the cylinder from the source of cooling air increased, this giving greater heat-radiating surface to those cylinders which felt least the effect of the cooling fan.

Rate of conduction is proportional to the area of the section through which conduction takes place, and the 1910 method of casting in the flanges increases this section and thereby aids in producing greater radiation of heat.

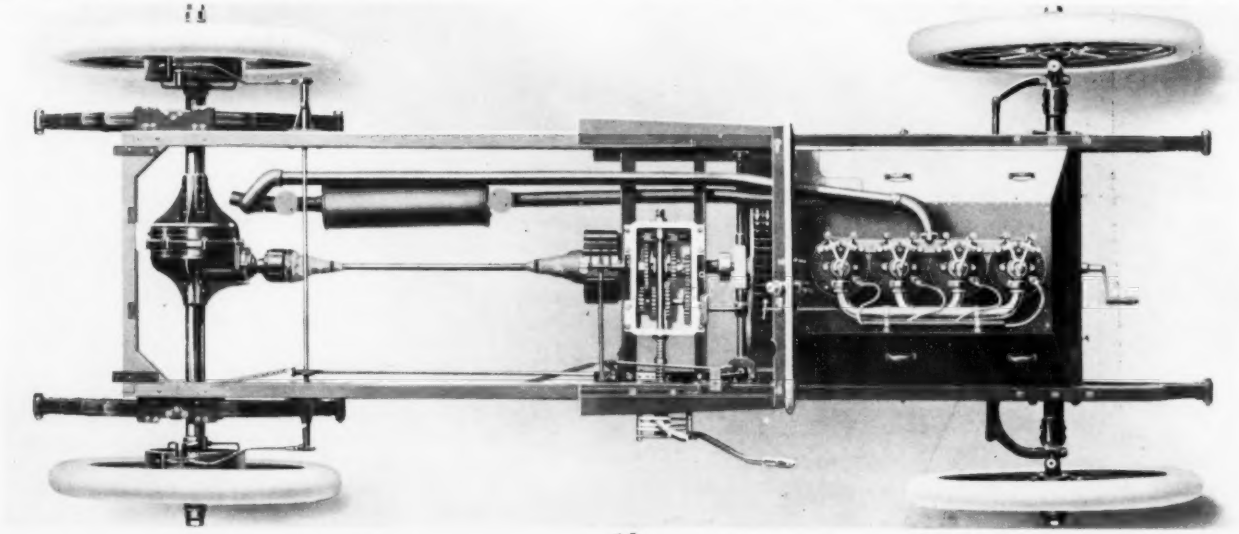
By the new directed or local cooling of the motor the cooling air is kept close to the cylinder wall from the time it enters until it leaves. The number of parts is lessened, the fan by means of which the air current is induced being made an integral part of the surface or rim of the usual flywheel.

In appearance the greatest difference of the new engine from the old is caused by enclosing in sheet metal all of the engine except the cylinder heads in order to produce the cooling suction.

Three constructional features of the engine, which are retained from the models of previous years, are to be seen in an auxiliary exhaust, concentric intake and exhaust valves, and a dome-headed cylinder. Each of these is a considerable factor in the Franklin system of air cooling.

One Ignition System and No Spark Advance Lever—A single ignition system, that of the Bosch high tension magneto, is retained for a second year after a season's trial, which has shown it to be the most successful method of ignition. Spark control lever is abandoned on all models. The 18-horsepower cars were last season built with a fixed spark and are again so built for 1910. In the 28 and 42-horsepower classes, with the spark control lever now gone, the magneto is provided with a governor, which controls the ignition up to a speed of twelve miles an hour on the high gear, retarding it automatically at that point to take care of the motor's needs.

Simplicity has always been an aim in Franklin construction, and nothing before has gone farther in the direction of the elimination of complication than the 1910 control. The driver has nothing to handle but the throttle, unless he changes speed.



Multiple Disc Clutch Retained Unchanged—The clutch shows a retention of the multiple disc type, phosphor bronze and steel alternating as the material of the discs. The clutch is within the fan flywheel. When it is engaged the discs are held firmly together by means of a spiral spring.

Carbureter is of the automatic, float-feed type. An improvement in its arrangement is shown in the removal of the primer connection from the dashboard and terminating it in a button at a lower corner of the hood front, where it is most convenient if occasion for its use arises when cranking the engine.

Another improvement in connection with the carbureter is a tributary pipe by which cool air instead of warm may be admitted. For cold weather driving, the air is taken by means of a pipe running from the auxiliary exhaust. In warm weather, this can be closed by a butterfly valve and air of the coolness of the outside atmosphere be taken through the tributary pipe which comes through the top of the engine jacket and which in cold weather is closed by a cap.

Progressive Transmission Finally Abandoned—A tendency toward uniformity of construction in the several models is evidenced not only in the ignition but in a number of other particulars. An instance is afforded by the transmission, all models for 1910 being equipped with a selective sliding transmission, whereas last year on the smallest model was used a transmission of the progressive sliding type.

All of the 1910 models have a worm steering gear, which eliminates loss of motion and facilitates handling of the car. In addition the steering device shows a slight change, the steering arm being made to fit the larger steering yoke, and the diagonal steering tube being increased in diameter from seven-eighths of an inch to one inch. The steering wheel of the smallest model is increased in size, so that all are now 17 inches in diameter.

A new feature is an auxiliary oil pump on the dashboard for use in the event of extra oil being required in long stretches of hard going. In the general improvement of lubrication, small grease cups have wherever possible been substituted for oil cups, as at the base of the clutch lever and change-gear lever.

Origin of the Round Grille

J. Van Groningen

About a year ago when we decided that the wonderful barrel hood age of Franklin should dominate at least one issue of ACN, we naturally fell to wondering where the round hood or round grille may have originated as a design motif. We "knew" that RENAULT originated the type of hood that bears their name. (If you start research on this you are in for some surprises.)* We thought that a design as ancient as the simple circle might be hard to trace at all.

Member J. van Groningen of Leiden, Holland undertook this task. Miles Amick, assisted by the Library Research Department of Encyclopaedia Britannica, aided for his part of the world. M. Henri Malartre and M. Paul Melot, both of Lyon, France directly assisted Mr. van Groningen in Europe. Mr. Amick's studies alone covered about forty books and periodicals, the European team did not list their bibliography but undoubtedly their work covered an even more extensive search of European libraries and records.

These combined investigations brought out some interesting facts as well as some definite contradictions. From the sources directly available to Mr. van Groningen it appeared that the form was used by DELAUNAY-BELLEVILLE first in 1906, Mr. Amick located a first date for them of 1905, while both M. Malartre and M. Melot found some evidence to indicate they had used it in 1903. On the other hand M. Melot shows the first SPIJKER with round radiator as 1912, Mr. van Groningen states it was used as early as 1904. (We have a picture in our files of a 1905 SPIJKER with a round radiator.—Ed.). FRANKLIN first used the form as a grille in Model C, actually built in 1903 but intended as a 1904 model.

From these somewhat conflicting historical records apparently DELAUNAY-BELLEVILLE, FRANKLIN and SPIJKER must share honors for the first usage. In the absence of more data the nod should go to DELAUNAY. The DELAUNAY-BELLEVILLE produced by the already famous boiler makers of Paris was one of the really fine cars of France. This comment from "Edwardian Cars," by Ernest Carter, is of more than passing interest. "The really distinctive and original feature of the Delaunay-Belleville was the honeycomb radiator mounted in a perfectly circular frame in front of a perfectly circular bonnet, which gave the motorcar a peculiarly rakish appearance—outstanding to a degree. No doubt the bonnet's singular shape was a relic of the firm's boiler-making activities."

For a number of years the form became quite popular. In America a few cars promptly copied FRANKLIN and across the sea many makers took it up following its introduction by its originators over there.

Here is a summing up of the results of the combined research.

U. S. A.—FRANKLIN (1904), CHASE, PICKARD, PREMIER, KLINK, NATIONAL, AEROCAR. (all 1906 on).

BELGIUM—DE COSMO (1908), DASSE (1911).

ENGLAND—ROBINSON (1907).

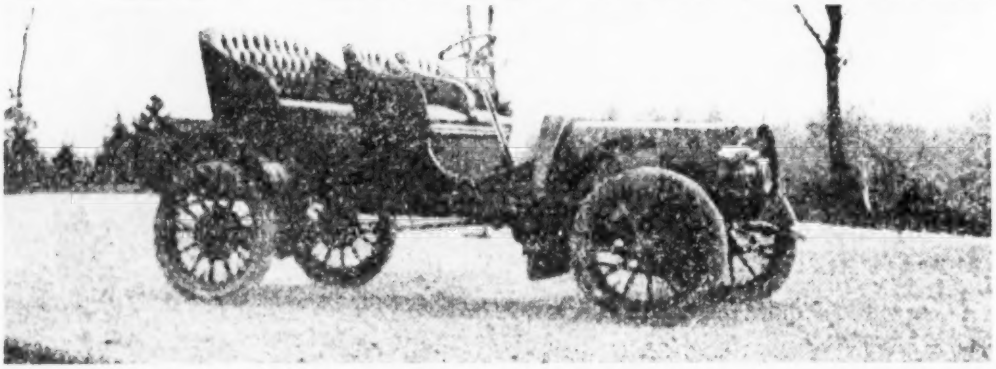
FRANCE—DELAUNAY-BELLEVILLE (1903-1905-1906-?) GARDNER-SERPOLLET (1905), CHENARD-WALKER (1906), HELBE (1906), TURGAN (1906), BURLAT (1907), VULPES (1907) GEORGES ROY (1909), LE GOY or LE GUI (1909), DIEDERICH (1910) not DeDietrich, C. L. C. (1911).

HOLLAND—SPIJKER (1904).

ITALY—LEGNANO (F. I. A. L. ?) (1906).

*For his own pleasure Mr. van Groningen extended his research to include the RENAULT form. He unearthed evidence that indicates this general form was used some time before being adopted by RENAULT, including at least one car in America.

A VERY SELDOM CAR INDEED



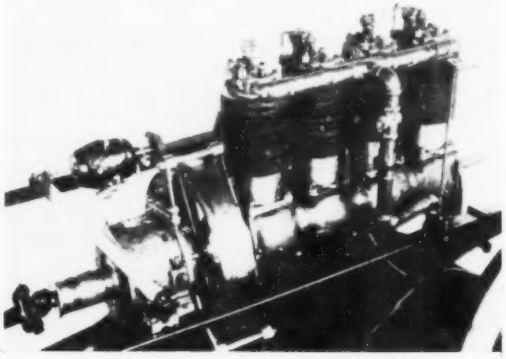
In the winter of 1903 Franklin brought out a whole new car in addition to their already famous cross engine series for exhibition at the 1904 show. They actually built of the new model barely a baker's dozen, but to the air cooled man it is fascinately interesting. Doing a prodigeous amount of checking while writing an article on the cross engine we managed to unearth quite a bit on the new model, one whose mere existence is unknown to many a Franklin man.

The 1904 Type "C" was in truth not so much a radical departure from their well known chain drive cross engine light cars as it was a development of the same ideas turned toward the building of higher powered automobiles. Its general design foreshadowed the wonderfully successful barrel hood period of Franklin. It was said by the writers of its day to be the most powerful air cooled production model so far attempted. It was rated by the Company at twenty-four horsepower.

Technically the car followed already established Franklin practice in many ways but also marked innovations as well. The frame was the same type previously used and with full elliptic springs, but in this model they were slung below the axle and no distance rods were used, the first use of drive through springs by Franklin.

A tubular front axle was used but with a drop instead of straight. Steering was the same Brown-Lipe device with the drag link to right knuckle instead of diagonally to the left as before. Drive was shaft through simple cardan joints to a spherical cast steel differential housing. This model used the prevailing bevel gears though Franklin later went to a spur differential for many years. 1½ inch hammered steel axle shafts were used with a wheel fastening similar to cross engine practice. Wood artillery wheels with 32 by 4 tires were supplied.

The engine, a four cylinder, was what present day copy-writers are pleased to dub "oversquare," a whopping 5" bore by 4" stroke. The cylinders were cast steel, machined inside and out. It also featured what we believe to be the first use of copper cooling fins, a practice Franklin promptly dropped and revived again in their 1908 car. Copper fins were heralded as something revolutionary in air cooling by the short lived air cooled Chevrolet of 1923!



Engine of the Franklin 24 H. P. Car. Type C.

Barrel crankcase was of cast iron in the Franklin one piece manner, with cheek pieces at both ends. It is described as having hand holes on both sides though this is not apparent in the only engine picture available. A cast steel crankshaft was used carried in five main bearings. Connecting rods were also of cast steel and all engine bearings, mains, rods and cam shaft were of phosphor bronze—somewhat hard to understand as the Company was already producing die cast bearings. The pistons, of course, were cast iron. They were apparently quite lightly constructed with generous webbing.

Following previous practice both valves were in cages, easily removable by the withdrawal of two bolts to each cage. As the company had not yet come to mechanical intake valves on the little car, this one too was automatic. The auxiliary exhaust, long a Franklin feature, was not to come for another year. Valves were, of course, overhead and the exhausts function through push rods with adjustable tappets.

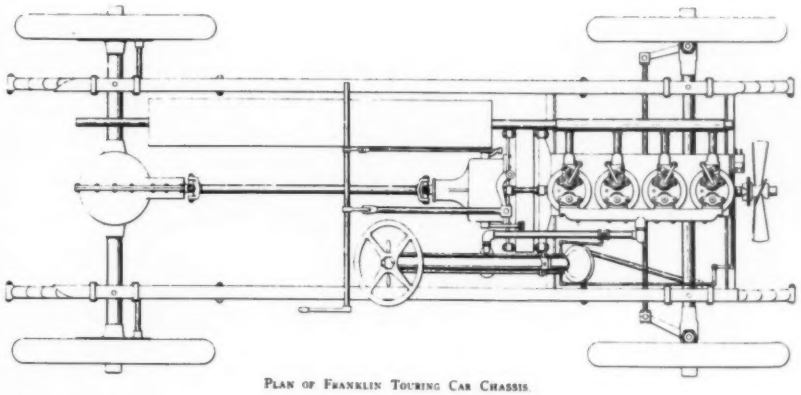
Lubrication was by splash, fed from a positive and adjustable pump oiler, engine driven and located under the hood.

For ignition, four vibrator coils in a dashboard case were supplied with current from a storage battery mounted in a box suspended from the frame. The commutator, similar to those used before, was mounted on the front end of the camshaft, with a somewhat complicated linkage to the steering post spark lever. The picture of this engine shows an Apple dynamo as a current source, though it is nowhere mentioned in descriptions of the engine.

The carburetor appears to be identical with that used on the light car, except, perhaps, in size. It had all the features used before by Franklin, including adjustable needle valve, constricted throat and the quite successful automatic air valve shown at D in the illustration. The chassis drawing shows an extremely long induction pipe, perhaps 30" long, which was probably not one of the best features of the engine. Tank was under the seat and held sixteen gallons. Not much Company performance data seems to be available, except a top

*This very expressive phrase was used by member Jens Mortensen of Norway to describe the rarity of his own Franklin on the streets of Oslo. While we are unaccustomed to this usage over here it is perfectly sound English and appeals strongly to us.—Ed.

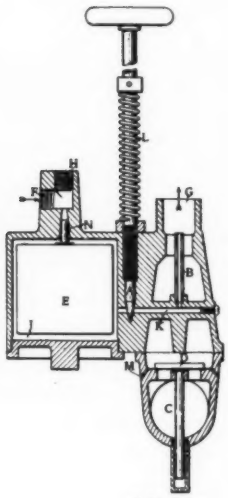
RPM of 1200 and a speed of 4 to 40 miles per hour and a fuel consumption figure of 11 miles per gallon. Rear axle ratio was 3.5 to 1, low speed 10 to 1 and reverse was 20 to 1.



Plan of Franklin Touring Car Chassis

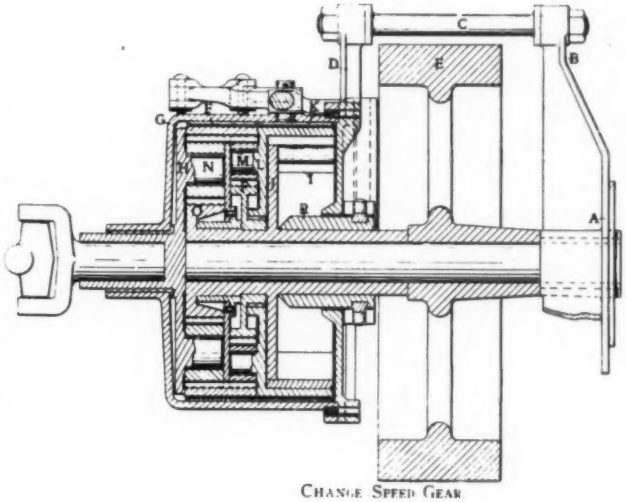
The transmission was an adaptation of the bronze band planatary type previously used. Its mounting may be easily understood from the engine and chassis pictures. As the engine base and the gear case were securely bolted together it should have eliminated any alignment difficulties. High and low speeds were controlled by a side lever and the reverse was by a pedal as in the light car. The brakes, applied with a foot pedal which was apparently non-locking, were a contracting type on the rear wheels and seem to have been steel to steel and without an equalizer. It was acceptable Franklin practice to use the planatary reverse as a service brake, the Company claiming that no amount of harsh usage in this manner was detrimental.

The car weighed 2,200 pounds and was of 96 inch wheelbase and was fitted with a five passenger touring body. It was described as a side door type though the only picture at hand —a miserably poor one— looks a bit more like a surry type. The hood, while not a true barrel type,— was fitted with a round grille, so it may be considered the first of an honored line —the round hood Franklins.



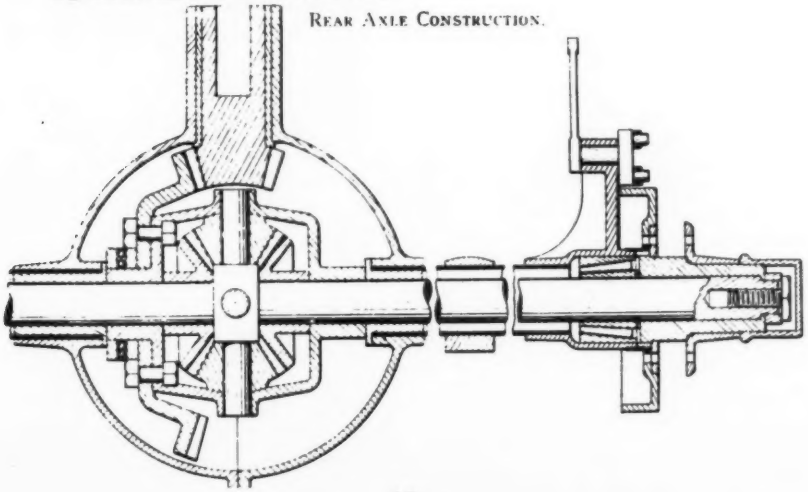
Carburetor.

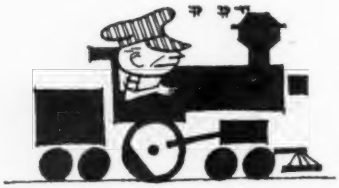
Type "C" was built in very limited numbers, we have been unable to secure a list of serial numbers and no example is known to have survived. Mr. John Burns of Syracuse states that only from eight to twelve of them were produced. He recalls their purchase by Col. E. H. R. Green and Mr. Pillsbury, of flour fame. Walter Winchester, who drove the Franklin Vanderbilt entry and who later went with Pierce-Arrow, campaigned one of these cars for Colonel Green for a season on the dirt tracks with creditable success. Here the history of these big bored cars seems to blink out.



Change Speed Gear

Rear Axle Construction.





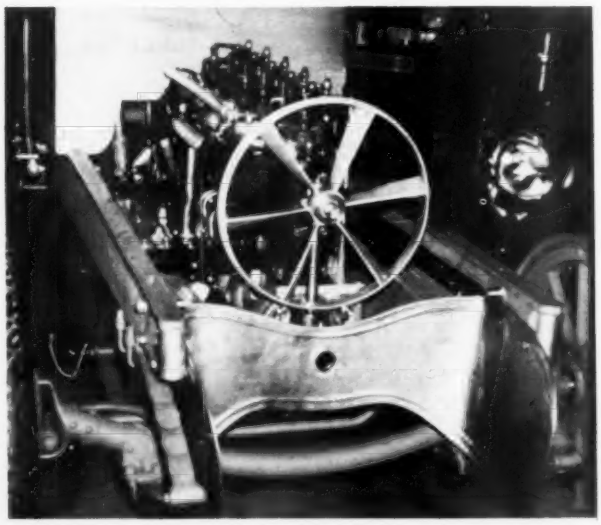
THE CASE OF THE PREPAID FREIGHT

Some of you would like restoration articles, some of you would think them only space wasters. Up to now AIR COOLED NEWS has never printed a story on this generally popular subject but the case of the 1909 H and what maestro Buchman did with it cannot be wholly passed by. We tried to get Mr. Buchman to write it himself but he weaseled out of the chore, so it becomes a second hand story with all the faults that implies.

For a long time Earl has sought a 1910 barrel hooded H to ride point to his cross engine and his 1912 G. He finally amended this search to include any H. Eventually he purchased two badly decomposed cars, a 1907 and a 1909, the Seven from Hugh Risdon of New Jersey and the Nine from Lloyd Harkness of Montana. Of course he had never seen either car but when he and Harriet went for the Risdon car he wisely took his trailer and a few packing cases, and that is just how he brought it back, scattering the parts throughout his place in Ohio, some in the garage, a few in the cellar, some just left outside and a lot of motor parts in the doghouse (which we suppose is symbolic of something). About this time he heard from Harkness, that the railroad would not accept the 1909 unless freight was paid in advance, they, in their collosal ignorance of the antiquer, solemnly declared that, "there is no one back East fool enough to pay this freight when he sees what it is." However, there was one Easterner foolish enough, so the money was advanced and another so called car arrived at Garrettsville.

We visited Earl about this time and were shown the most hopeless looking bunch of rags and bones we have ever seen. Neither car had a complete frame, neither had a complete rear axle, the nearest thing to a body was the center section and one seat without upholstery or even springs, two steering gears but no steering wheel, mismatched wheels, dozens and dozens of necessary smaller parts missing. Two hoods, the better one of which had a hole in it big enough to throw a spitting cat through nicely. Earl seemed quite undaunted and proudly showed us a complete set of exceptionally fine lamps that several friends had given him! We went into a huddle and came out with the idea that it would end up as a 1909 single rumble runabout with a Victoria top. Fenton Meredith sketched the proposed car during our discussion. And then we sent some catalogue pictures, Fenton's drawings hit it so closely they could have been traced from our catalogue.

The next time we visited Garrettsville the 1909 engine was running, the frame had been made, the fragmentary rear end was again an operating axle, much of the body had been made and plans were laid out for the rumble seat and the top. We had a long discussion on colors, upholstery and minor things like floor covering. Earl finally painted it blue, we were sure that our argument for bright red with black fenders had gone across! One more trip out there and we saw the chassis assembled, the dash had been made and installed, plating completed and well on its way to a trial run.



The last time we saw this car it was at the Trek, only eleven months after that "Eastern fool" paid the freight. Complete with windshield, Victoria top, rumble seat, a perfect 1909 Single Rumble Runabout. (If we recall rightly Franklin always said runabout, never roadster). The Club's BEST IN SHOW plaque went with it back to Garrettsville. About a month later

Fenton and Earl took it to the Eleventh Glidden Tour out in Indiana. Another plaque, THE H. H. FRANKLIN MEMORIAL AWARD, came back to Garrettsville from this run.

We regret that we could not prevail upon Earl to write the story of this restoration, for much ingenuity and much fine skill went into the H before it emerged as we have now seen it.

About the time we reached this point in writing the story we received a letter from Earl setting forth the many details involved in this restoration. Rather than try to rewrite his story for him with its inevitable mistakes and omissions we will let his letter and these few pictures tell the story of this accomplishment with truer eloquence.

". . . . The one in New Jersey was dismantled for two years and the owner apparently got cold feet for it was not nearly all there. The one in Montana was in worse shape for he had had it two years and never had nerve enough to tear it down, as it also wasn't all there. That is, of course, the main reason I was able to buy them. Glad I got the one in New Jersey first or maybe I would have been like the railroad company in Montana.

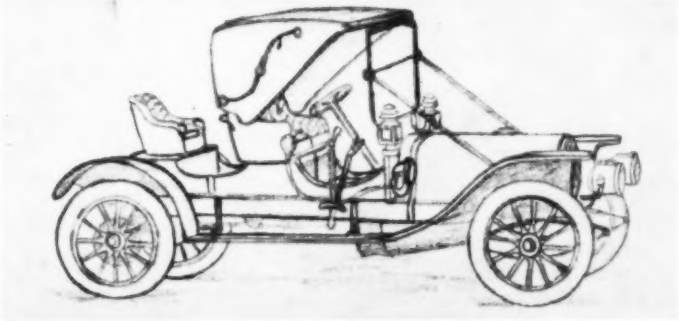
First thing I did was to true up the crankshaft. Then sent the rods and cheek pieces to Pittsburgh for rebabbiting. Oil spouts were used on the connecting rods. Rebored the cylinders. Bored out the valve cages for bushings for the intakes. The exhaust guides being too small to bush I just reamed them for 1/64" oversize drill rod which I used for valve stems with the old heads. Drill rod makes good valve stems and can be tempered on the end. Was able to buy from Boston Gear Company new magneto and idler gears, idler was 42 teeth instead of 40, as I made an eccentric strut and set it off center enough to make up for this.

Valve lifter guides were also bushed. The clutch to transmission jack shaft universal blocks and pins were made of tool steel and tempered with, of course, the leather boot assembly. [Mr. Buchman has a very clever method of fitting a full boot, not originally furnished. Any member with a car of this period should write him about this decided improvement.—Ed.] Two gears and a pilot bearing had to be made for the transmission. Three of the ball bearings were replaced and fitted with modern grease seals. I had to make a new transmission brake drum, the shaft being square I used a split hub of the clamp type to do away with looseness.

Drive shaft, differential and rear end housing are partly Type H and partly Series 11 and 12 parts. Made new axle shafts of the full floating type. Front wheels had to be cut down to match rear so as to use 36 x 4½ tires. All new bearings used in front and rear wheels, with leather retainers. New front end king pins and steering link pins were made of tool steel and hardened. New brass grease cups were used with combination of new Zerk fittings. [Ask Information Center on this idea—Ed.] New wood sills were made of ash using two sections instead of three, 2" wide instead of 1¾" and 7" deep through the middle section instead of 6". The angle iron used for motor and transmission support was replaced with ¼" stock in place of 3/16", some of the old was cracked. Both barrel hoods were used, one to close the hole in the other.

Front seat was recovered with sheet steel but the lower part of body and the remainder of the body and rumble seat is completely new. Made completely new windshield with exception of several small parts. Top, of Victoria style, is completely new. Landau irons were purchased but had to be lengthened.

Following the Trek and Glidden I installed new valve springs with a considerable improvement in running. Fan is still noisy but the engineers from the Akron Gear & Engineering Company think they can correct this. I have taken the fan assembly down to them." —EARL BUCHMAN



Original Meredith sketch —an excellent photo of the completed car appeared in the October issue of A. C. N.

The 1956 Glidden Tour

We were unable to make the Glidden Tour this year and as our designated Tour reporter has failed to get his story through to us in time this very meagre bit will have to suffice.

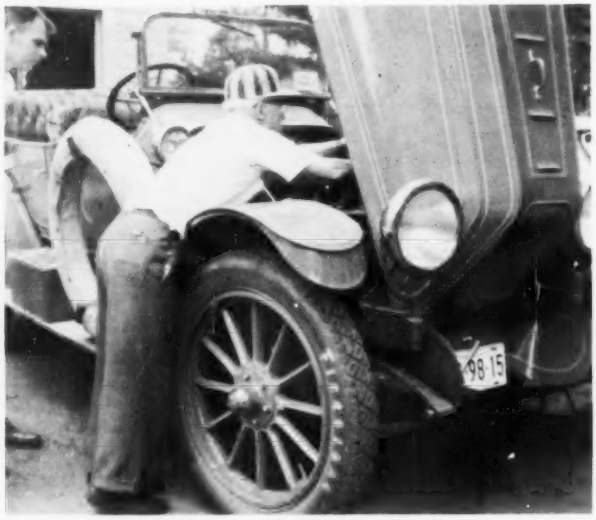
The number of Franklins fell off sharply this year, there being only four listed as entrants: Leland DeNies of Michigan with a 1923, Karl Feather from Maryland with a 1929, Earl Buchman of Ohio with a 1909 and H. C. Dodge of Mississippi with a Series 135 Brougham. Mr. Dodge is reported to have taken a class prize. The General Electric people at Louisville awarded a number of special prizes, one, given by the Manager of Engineering, for "The Car I wish I had Engineered," was won by Mr. Buchman. The H. H. Franklin Memorial Award presented by this Club to the VMCCA also went to Mr. Buchman's 1909 Runabout.

This year the Tour was based at the Sheraton Hotel in French Lick Springs, Indiana. Daily hub tours were made to nearby points. It is said that this plan met with much favor among the women tourists as they were relieved from much packing and unpacking. Also for once real consideration was given to the older cars on a Glidden Tour, the longest day's run for the pre-1913 class was one hundred and twenty-five miles to Louisville and back. We were not there but we presume they also had the usual "Antique Car Demolition Exercise." Why, oh why, do we spend years restoring these wonderful old cars and then try our best to ruin them again in these car wracking parades?

We are indebted to Dr. Wendell Stadle, the Tour chairman, for the excellent picture of Mr. Buchman with the Memorial Award shown in this issue.

The Tour in 1957 will be under the chief sponsorship of the AACA and will be held in Virginia and Pennsylvania. A worthwhile experience if you can make it.

John Burns Column



John Burns, our Technical Advisor, is the top all around Franklin expert living today. Mr. Burns will answer all questions of a mechanical nature submitted by members. In taking advantage of this department you incur several obligations as there is no charge for this priceless advice, you will enclose a stamped, self-addressed envelope with your question and you will submit a copy of your question and Mr. Burns' reply to the Editorial office for the use of this column.

Included in this column from time to time will be information of like kind submitted by other members and appearing over their name.

Correspondence for this column should be direct to Mr. John L. Burns, 225 Reed Avenue, Syracuse, New York.

VIBRATION

Robert M. Carter III, Tallmadge, Ohio, asks: In my 1928 Franklin I have a terrific vibration. Nos. 3 and 4 pistons are 1/16" shorter than other four. Could this do it? Have observed the fan when running and it runs dead true.

Answer by Mr. Burns:

"When you assemble a motor with 2 pistons 1/16" shorter than others you do two things: first you change the compression and, second, you change the weight. If I had your engine to correct I would take off all six cylinders. Then I would decide whether or not I wanted a motor with a lot more power. If so, I would select new pistons that are approximately 1/16" higher than the original pistons. Have them ground so that they will be .003 smaller at bottom of skirt than the bore of the cylinder at the bottom, and then have the piston ground .007 smaller than the cylinder bore for half the length of the skirt of the piston. First have your cylinder honed to clean up clear to extreme top—new pistons will be a bit longer. Fit them with Perfect Circle rings, the top one to be chrome plated. Also—pistons are T slotted full length of skirt. Break in carefully. Top speed of 35 MPH first 50 miles, with a pint of oil in gas tank. A fan can be out of balance and still run true. Put it on centers and check it."

Mr. Carter adds: "I removed and checked the fan as suggested and found that one third of the circumference was packed with grease. I cleaned it and now it runs like new."

CAM SETTINGS

Mr. Frank E. C. Ball of Calgary, Alberta, an old Franklin dealer, asks for data on cam shaft settings on his 1933 and 1934 Olympics:

Answer by Mr. Burns:

"About all I can tell you in relation to cam setting, all our later cams were practically alike, and settings as well.

We designated the opening of the intake as the rule. Proceed as follows—Put engine on TDC 1-6 cylinders, using the marking on fan rim △ aligning with mark on back wall of fan housing, transfer marking for easy reading. Put 1-6 walking beam or rocker arm in firing position, adjusting the intake rocker screw to just bite on a .031 feeler gauge. Put chain over cam shaft sprocket gear and secure cam gear to cam shaft flange in its proper set of flange holes. In other words your intake valve should start to open between ½" early and ¼" late. What I mean to say is after you had attached the chain and sprocket then you will turn engine over until No. 1 intake rocker bites onto the No. 1 intake valve. Of course you will have removed the .031 feeler after setting it. You have several sets of holes in cam gear sprocket to align with holes in cam shaft. I always liked the late setting. Reset the intake clearance to about .007 when through. Re-cap: Firing position 1-6. Adjust No. 1 intake a clean .031, just a bite. Put on chain. Assemble sprockets. Turn over engine until No. 1 intake rocker bites (same tightness), should be ½" early to ¼" late using mark on fan △ and dent in fan housing for position."

MORE VIBRATION

Donald W. Kitchin of Kimberton, Pennsylvania, submits some findings of general interest:

"I experienced quite a bit of vibration at 40-45 MPH in my Series 135 sedan that I thought must be universals. Investigation disclosed that a large quantity of grease had accumulated on the inside of the emergency brake drum, this resulted in a further accumulation of dirt to a considerable depth all on one side. Considering the relative high speed of this drum a considerable imbalance was set up. After cleaning this thoroughly there was a decided improvement. This same condition could occur with more marked effect in some of the earlier models with their large transmission service brakes."

DISPLACEMENT

Gordon Howard, Warwick, R. I., asks:

What is displacement of side draft cylinder head? I figured it out to 10.49 cu. ins. Does piston extend into head, come even with top of cylinder wall or stop below it?

Answer by Mr. Burns:

To get volume correctly jack up rear end until the face of head where spark plug fits into head is level fore and aft and sideways. Put a bubble guage in spark plug hole. Made by soldering a piece of ¼" copper tube, 5 or 6 inches long, into a spark plug shell, screw down tight. Now turn over engine to compression stroke of test cylinder. Get it almost to top then start to wet end of tube with soap bubbles. Keep coming up ever so carefully until bubble is about to shrink—That is top dead center—Then get a C. C. guage glass, one holding plenty of engine oil. Starting at top line turn petcock and slowly let it enter cylinder through spark plug hole until it reaches the 5th thread from top. That's it.

Your piston does not quite reach top end of cylinder. With a light and mirror you can see it.

Compression ratio of Series 15 was 5.12, also Series 16, H. P. was 92 at 3000 RPM. Displacement of 29 through 32 was 272 ins.

MEMORANDUM

A report has reached us that an unnamed member spent $264.00 to have a set of valves machined for a certain Franklin. There are easier and less expensive ways to do these things, this column and the Information Center can be of much help if you will use them.

ACROSS AMERICA IN A FRANKLIN

WE started out with three kind letters given us respectively by Major-General A. W. Greeley to Major-General Wade; President R. P. Schmerin of the Automobile Club of California to the President of the Automobile Club of America, and by Mayor Schmitz of San Francisco to Mayor McClellan and the citizens of New York, thanking them for New York's assistance to San Francisco in her recent calamity.

When you have read the story of our trip, you will say we did wisely to get official testimony that we were actually alive, and had whole necks, when we started from San Francisco, August the second, Nineteen Six. Perhaps you'll think we need an official confirmation of the fact that we are still living.

WHAT WE WENT AFTER

We were after a new transcontinental record.

The Franklin already held the record; but we wanted to cut it in halves and throw away about eighteen days which we had no use for. We also wanted to demonstrate what can be done with a motor-car that a sane man wants to do.

THE OUTFIT

Our car was a regular six-cylinder Franklin Stock Touring-car.

We took off the tonneau; substituted a large hamper; carried a steamer-trunk to hold clothing; and an extra gasoline tank, two extra tires, five inner tubes, an extra set of batteries, extra brake-band, some spark-plugs, bag of tools; sack of bolts, nuts and small parts; an axe, a shovel, pulley-block, two stout hickory poles and 150 feet of rope—and thereby hangs the tale.

A BAD START

Carris, Harris, Bates, Daley and Yours Motorfully undertook to do the honors; Bates and I taking the car for the first relay to Summit Station in the Sierras; Carris and Daley going on to there by train.

From the six-million dollar wreck that was once the San Francisco City Hall, we traveled through 2400 acres of pathetic waste, relieved by inspiring evidences that the New San Francisco will be greater than the old.

Rolling down Market Street at the start, we met Mayor Schmitz, who shook hands with us and gave us "Good-bye and good luck"—which we certainly didn't strike at the start; for the Sacramento and San Joaquin rivers were all over the easy four or five-hour road from Oakland to Sacramento; and instead of going this way we had to ferry all the way to Stockton—which put us ten hours to the bad at the very start.

From Stockton we skimmed through sixty miles of wheat fields to Sacramento in just two hours.

In the afternoon, we climbed a hundred and fifty miles of mountain; through beautiful fruit country, big pine forests and twenty miles of rocky ledges; reaching Summit Station at the same time as the "Overland Limited," which made the hundred-mile run on smooth rails only two hours faster than the Franklin came up the 150 miles of crooked and rocky mountain road.

DROPPING DOWN THE SIERRAS

Bates and I sought the solace which a dining-car grants; while Carris and Daley took the Franklin and plunged off down the 1200 feet drop in the first mile, toward Donner Lake.

They ran from 7:40 in the evening until 6 the next morning, except for the time that they were digging themselves out of the desert sand, salt marsh or the hub-deep alkaline shore of Humboldt Lake.

In the Humboldt "Sink," as it is called, the hard top crust kept breaking through and letting them down into the quick-sands; so that at one point they could only go seventeen miles in seven hours. Yet the motor did not overheat. No heavy car could have made any headway at all along this route.

They lost one canteen, and the other sprung a leak so that they were 10 hours on the burning sands of Humboldt Sink without a drop of water. And when they rolled into Lovelock they carried the most capacious thirst that ever was packed on a motor-car.

And there was I a'waiting at the trough — in a nearby restaurant.

The Franklin also was ready for twenty gallons of gasoline and altogether we had a brief but joyous tank-fest before piling into the machine—all four of us, and pulling out at 7 P. M. across the State of Nevada.

Later on we dropped this State behind; and we think of offering a liberal reward to the finder for leaving it just where it is.

The Start

There isn't a lake or river in the whole big State that has an outlet in summer. Every stream sinks into the sand or evaporates under the six months of cloudless sun. The sand burns your feet through leather shoes. On the railroad track you can cook an egg in the sun. Yet at night under the sparkling stars you need a blanket to keep warm.

The sun has the despicable early-rising habit; gets up red-eyed and ugly; looks you flat in the face, and says—"I'll make it hot for you today!"

BUMPING THE BUMPS

From Mill City we bumped for thirty miles over the railway sleepers. If you want to know why, go out there and take a look at the situation—we took the easiest way.

About midnight we got off the track to get out of the way of two fast trains and went to bed on the sand until they had passed. Then we were on again, gone again, bump again, Finnegan—to Winnemucca, arriving at 2:30 A. M.

A ROADLESS WAY

For six hundred miles of this country there is no real road. The early trail in these regions was made by the first adventurer driving where nature offered the least resistance; the next followed this track and so the trail was formed. But, when this became washed into deep ruts by heavy rains, instead of rebuilding the trail, another would be formed in similar fashion; and that in turn abandoned.

I have seen five sets of trails paralleling each other, all impassable but the last—and that was not a boulevard. Anything that a wagon-axle will slide over is considered good enough. Only our high ground-clearance made it possible for us to get along.

For a thousand miles the country is a destitute barren desert waste with no forests and few streams. Only burning sand, sagebrush and dazzling alkali flats.

At Winnemucca, Carris took the train for Elko; Daley took to bed in a hotel; the Franklin took gasoline and oil—dug up by an obliging freight-agent—and Harris and I took ourselves off through the night, reaching Golconda in the early streaks of dawn. This sounds very romantic; but it is certainly the Gol-condest hottest place on the map.

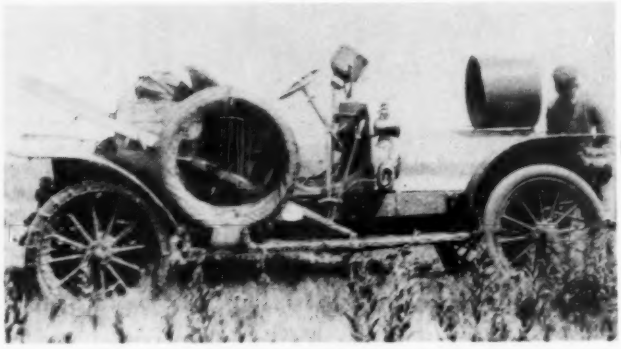
At Battle Mountain, Bates met us with more gasoline and a guide to show us the next twenty-five miles of blind trail.

A LARGE BEEF STAKE

Here we passed through a big 50x20 miles ranch—640,000 acres; 57,000 acres fenced in one field—said to be the largest fenced field in America—15,000 head of cattle and 5,000 horses roam here. I wonder what a woman with a red parasol does when she strikes that field—It must be fatiguing to go around.

We drove through acres of wild flowers ten feet high.

Comin' Round The Mountain . . .



DITCHES AND WASHOUTS

Reached Elko at 2:30 P. M. and gave the car up to Carris and Bates, who next showed up at Ogden, Utah, at 2 P. M., the following day, having passed clear around Salt Lake over some very bad roads. They encountered one big dry washout. And the heavy rains had left ditches from two to six feet deep. It took a great deal of time crossing these ditches at the best points. And at many places the machine was terribly racked.

This continuous severe punishment must have gradually weakened the rear driving-axle; for within twenty-four hours it suddenly gave way, from no apparent cause.

This held us up twenty-eight solid hours while we sent to Cheyenne for a new rear axle. When it came, we took about ten minutes putting it in.

LESS THAN FOUR DAYS TO OGDEN

We reached Ogden in 3 days, 20 hours, and 30 minutes from San Francisco. The best former record was 10 days; made in a four-cylinder Franklin. The best time ever made in any other automobile was 16 days.

Harris and I sent her out of Ogden before sunrise and were up in Weber Canon by sunset. We went by Devil's Slide, Devil's Gate, Echo Rock, through deep defiles and along rocky cliffs through a natural gateway in the mountains; through Evanston at 10 A. M. and on until midnight when we reached an elevated plateau 7,000 feet above the sea.

Here it was cold enough for rubber coats over the leather ones.

After a midnight luncheon, we pushed on till stalled by a mudhole; pulled out with our blocks and nearby fence-posts; wandered and floundered through irrigating ditches of irritating frequency; spun through a fifty-acre oat field; rushed three nasty fords with water pouring into the engines; and made Granger at 9:30 A. M.

Carris and Bates stood on the far bank of the last ford like a couple of welcoming angels, gasoline in one hand and breakfast in the other.

"WATER COOLING" WITH A VENGEANCE

They leaped into "the saddle" and disappeared in a cloud of dust, getting their next drink in four feet of water over the tops of the tires, in the middle of the "Big Muddy" an hour later.

Even Franklin engineering isn't at its best under water. The nearest team was at Green River twenty miles away; so after a little wireless "hellegraphy" which failed to "Carry" the twenty miles, they got out their hickory sticks and pried their craft ashore inch by inch.

They had to draw the water out of the engine-base; bore a hole and let the water out of the battery-box; empty their shoes and wring their legs before proceeding. The engine started right away again as soon as it got its nose above water!

All the streams were higher this summer than usual on account of last winter's heavy snow-fall. And we were stuck or hampered by mud a good deal of the way.

AN AWFUL FIX

Between Red Desert and Rawlins, Wyoming, we tried to cross the bed of a creek on a slippery clay bottom; but, although we put sage-brush down to make a track, our wheels would not take hold. We went to a station two and one-half miles away for help; and about fifty men came and pulled us out.

But after getting out, there was only gasoline enough to run two and one-half miles. Then we bought some kerosene and ran seventeen miles on kerosene to Rawlins—which speaks volumes for the Franklin carburetor. I don't believe there's another carburetor that would run that distance on kerosene.

At Rawlins we got gasoline; left in an hour; ran to the Laramie River—which we forded; made Laramie at 2 A. M., and waited till daylight for more gasoline.

"It's Best To Keep The Chains Tight!"

We reached Cheyenne at 11 A. M. the same day, August 9th. At Sherman we reached our highest elevation, 8,000 feet.

We replaced a spring, one of whose leaves had slipped out; left Cheyenne at noon, and after traveling 240 miles, arrived at North Platte, Nebraska, 3 A. M. August 10th.

A HUNDRED MILES OF MUD

We put on our tire-chains here; and we needed them, along the North Platte we found a hundred miles of mud. I do not mean a hundred miles deep, for after a good rain it is deeper than that, but a hundred miles long in one solid stretch. And at times the mud flew twenty feet high as we skated along.

Equal parts of corn, hog and black mud are the recipe for this part of Nebraska after a rain. And they are all rich and fat. I wish I owned a Nebraska farm.

We waltzed and slid and "swung partners" all over this territory; occasionally landing in ditches and plunging into barb-wire fences.

You hear a lot about gentle Mother Earth and her kindness toward man; but when you've traveled a few thousand miles through floods, mud, sand, alkali, and gumbo, you come to think this maternal benevolence is altogether too strenuous and sticky; and that a good man-made road beats nature all to pieces.

At Kearney, dry roads appeared again and we made the dust fly across three hundred miles of the finest farming land in the world.

We pulled the switch-plug at Omaha 12 midnight; having left North Platte at 4 A. M.—that's going some.

HELD UP

Over in Iowa the next day, just beyond Cedar Rapids, Daley passed a farmer who immediately had a feeling that he wanted a new buggy-pole as his was a little cracked. He saw a cloud of dust, which looked good to him; so he telephoned down the line toward Chicago for the police to stop our outfit long enough to take up a collection.

Daley was stopped at the second town by three deputies with guns; and a hundred blood-thirsty natives demanding unconditional surrender.

The name of this town was Chelsea. And I'll never say again—"As dead as Chelsea."

The farmer declared that Daley smashed his buggy-pole, although Daley never knew it; and has his doubts to this day.

But the farmer got a new pole; and Daley got eight hours —more time to the bad.

Arrived at Cedar Rapids August 12th—2 A. M./Chicago 5 P. M.

CHICAGO IN LESS THAN ELEVEN DAYS

We came into Chicago in 10 days and 21 hours from San Francisco. The best previous record, made by Carris and myself in 1904, was 25 days. The next best, made in a water-cooled car, was 50 days.

Up to this point, we had not touched a wrench to the engine except to change a few spark-plugs.

We put on new tires here solely for the purpose of beating the Chicago-to-New York record. They were not needed to finish the trip.

We tightened up the crank and connecting rod bolts a little; and Daley and Bates got away from Chicago at 10 P. M., August 12th. At daylight they were half way to Toledo.

Harris, Carris and I met them there at noon the next day; and those two undertook to drive to Erie, Pa.

A BAD SPILL

They passed Cleveland twenty-four hours out of Chicago; and the old record began to look sick.

But pride goeth before a spill: About eleven o'clock at night nearly up to the Pennsylvania line, thirty-two miles west of Erie, while sailing along at almost forty miles an hour on a fine stretch of road, they swung around a curve too short to hold; missed an iron bridge by twenty feet; plunged down a steep bank into the creek; crashed into a stone abutment on the opposite bank—and the car stopped.

Harris and Carris, however, kept right on after the record. In order to have the proper "light and leading" toward New York, Harris took the searchlight with him—clutched to his breast—and Carris tried to carry away the steering-wheel; and thought better of it and left it bent up over the dash.

The guide on the steamer-trunk pointed the way over the tree-tops in a graceful arc for fifty feet or so, into a friendly mud-puddle.

He was the first to show up uninjured. Carris sprained his ankle and bumped the front of his intellect; Harris wrenched his knee. Otherwise they were all right.

It is certainly true that people born to be electrocuted will never be killed in a motorcar smash.

When 3,150 pounds of automobile running like a fast express jumps into a bank of rock there are apt to be some proceedings to report. Front-axle, springs, steering post, lamp and front mud-guards did not look exactly wealthy; but they were certainly better off.

The engine was in perfect running order. The wood-sills were all whole; except the tip of one, where the lamps bolt on; rear axle all right, but one wheel had its spokes slightly sprung. The hamper hung out over one wheel, and the gasoline tank was aleak.

We towed the wreck back to Conneaut, Ohio, and took thirty-six hours getting machine and invalids patched up and on the road again.

Leaving Conneaut 11 P. M., August 15th, we ran through Erie to Buffalo.

ON THE HOME STRETCH

Just out of Buffalo along about midnight of the 16th, we suddenly passed a cop and surprised him so that he started to pinch himself to see if he was awake. But on second thoughts, he decided to pinch us. And took us back to make a fresh start about 1 P. M.

From Buffalo we flew on through Rochester, Syracuse, Utica and Albany, and on down the river till we struck the end of Kingsbridge at Harlem, August 17th, 11:12 P. M. where the swarm of automobiles filling the road made us fear for a moment that we were held up again, till we realized that New York City begins at the bridge; and we had actually arrived.

COMING UNDER THE WIRE

Allowing for the difference in time, we made the trip from San Francisco to New York in 15 days, 2 hours, 12 minutes. We brought along with us the record from Buffalo to New York in 23 hours.

Then followed loud demoniac yells, red fire, a procession to Hotel Astor, fizz bouquets—literal and figurative, a real bed and sweet oblivion.

At Conneaut After The Wreck

The fifteen days of broken sleep were beginning to show and one of the boys was so foolish as to attempt a bath before retiring; the consequence was that he fell asleep in the bath-tub, soaked five hours, and when he woke up the water was cold and the sun shining in the window.

SOME INTERESTING LESSONS

Well, what did we do; and what did we find out after all?

We did pretty near all that a motorist can do, except get himself killed. And it wasn't our fault that we stopped at that.

We climbed, coasted, slid, drove and bumped 4,000 miles twice as fast as it was ever done over the same route before.

Only eight automobiles ever crossed the American continent on their own wheels. Of the seven who tried for a speed record one crossed in 63 days; another in 61; another first crossed in 72 days and twice again in 44 days and 48 days; the four-cylinder Franklin in 33 days; and our six-cylinder Franklin in a little over 15 days.

CARVING UP THE RECORD

We were the only motorists who ever came within eleven days of touching our own previous record; and we beat it by eighteen days—crossed the United States in a month less than it was ever crossed in any motor-car but a Franklin.

We roasted, shivered, fasted and thirsted most mightily. We plunged in, dug out, pushed along, came in under the wire and chalked up some figures that beat the multiplication table. And that's a hard thing to do.

A SIX CYLINDER LESSON

We knew that four-cylinders were good—smooth, swift and ready; and we found that six cylinders are even better for eating up the miles—with mountains, deserts, swamps and rivers all thrown into the reckoning.

Carrying 3,150 pounds we averaged 300 miles a day when traveling; and ran in many places at fifty miles an hour. We climbed three mountain ranges and reached an altitude of 8,000 feet.

We made the run up the Sierra Nevada mountains 7,260 feet almost in "Overland Limited" train time.

Rough Goin' In Wyoming

NEW AIR COOLING EXPERIENCE

We covered 600 miles going almost constantly through deep desert sand with the mercury at 120 degrees, at an average of eleven miles an hour. And most of the way not a drop of water was obtainable. What could a water-cooled engine have done?

We proved that Franklin air-cooling cools a big powerful engine as well as a small one; cools on a hundred-and-fifty mile climb or with the mercury at 120 as perfectly as in winter or on a level floor.

A HARD BUMPING TRIAL

We traveled thirty miles over railroad ties with four passengers in four hours; which shows what human beings can stand in a resilient-frame car with four full-elliptic springs; and what such a car can stand without being damaged, or even stopping the motor.

A SEVERE ENDURANCE TEST

We demonstrated that high-grade light-weight construction gives a motor-car phenomenal endurance and resisting strength—more than would be possible with any other type of construction; more than we supposed was possible even in a Franklin.

Our wood-sills were substantially undamaged by that terrific smash near Conneaut. What would have happened to a pressed-steel sill? It would have been shivered to fragments.

If we had undertaken to arrange a special and infallible construction-test we could not have imagined a more trying and convincing climax than the various road conditions of this Franklin run capped by that frightful plunge.

THE RELIABILITY QUESTION

What did we learn about motoring realiability?

"Comparisons are odious," according to the proverb, and I don't want to be odious. But I can't help drawing a few comparisons to put our experience on that score in its proper light:—

In the famous Glidden Tour the cars were two weeks on the road; traveled leisurely and covered only 1,300 miles over civilized roads. Yet they had lots of trouble with axles and running-gear; although, according to the rules of the contest, they could repair at inspection stations and so make perfect scores.

In this Franklin transcontinental run, only two hours' labor was required for adjustment during the entire trip.

Up to Chicago—during 3,000 miles of the toughest going imaginable, we replaced three spark-plugs; repaired a leak in the gasoline tank; and repaired one front spring and one rear-axle drive-shaft. That was all the repairing we did until our accident near Conneaut.

Look at our big loss of time from causes that had no relation to the car—10 hours by floods; 12 by quicksands; 12 by the police; 32 by our only bad accident.

But making no allowance for accidents, ifs, or buts; after all is said and done, considered purely as a reliability demonstration, this run was certainly never equaled.

ECONOMY

We used 263 gallons of gasoline; 1½ gallons of kerosene; 21 gallons of cylinder oil; 3 gallons of gear and transmission oil.

We used up four sets of batteries and four spark-plugs. One spring slipped and one was broken. We had two punctures; and only needed one set of tires as we changed tires at Chicago simply in trying to make an additional new record.

The MOTOR WORLD truly says—"The performance was far more that of the car than of the driver, of which there were four." And MOTOR WAY says that this run across the United States is "The most remarkable accomplishment in the history of American motor-touring." But to my mind it is even more.

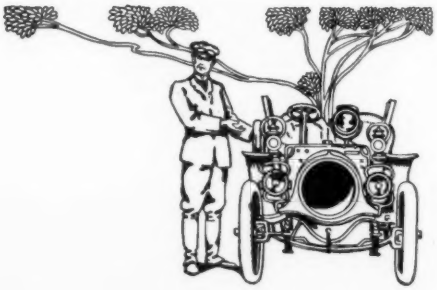
When you consider the all-around nature of the test; its racking severity; what it shows about the fundmental principles of automobile design and construction and its great practical significance to the entire motoring fraternity—it seems to me that this six-cylinder Franklin performance makes the greatest of all motoring records. And we're all proud of our share in it.

L. L. WHITMAN

P.S.—We took this identical car after its 4,100-mile run—back again 1,000 miles to Chicago and then made the return run to New York in 56 hours, 58 minutes; clipping 1 hour and 45 minutes from the Chicago-to-New York record. 500 miles of the way we ran without any fan.

P.P.S.—What about Franklin air-cooling?

L. L. W.



SPARE PARTS

THE CHARLEY SMITH REGION

The Republican Convention brought Joe Smith of Nebraska before the world and in one night made him a national figure. No doubt the Nebraska Smith is a man of proper stature to deserve such recognition and we do not wish to detract one whit from his fame. But we of the HHFC wish to present Charley Smith of Maryland . . . all four of him!

Yes the little state of Maryland has given us four Charles Smiths. Some means of distinguishing the many Smiths was imperative as all own Franklins. Charles E. of Baltimore is also something of a Ford fancier so he became "Model T Smitty," Charles R., Senior of Cabin John goes as "Cabin John Smitty," and the Charles R. from the middle of the state is known as "Boonsboro Smitty," then we have Charles R., Junior also from Cabin John who will have to get by as "Little Cabin Smitty."

Remarkable as the HHFC group of Charlies is we shamefacedly confess that our sister club, AACA, owns one more Maryland Charley Smith than we do. Your Membership Secretary pledges the old college try in adding Charlie C. of Baltimore to our fabulous collection.

DR. DYKE

We are one of those people who get mixed on farsightedness and nearsightedness and are never quite sure of the difference between a cold plug and a hot plug. Being also mixed up the other evening on a question of valve overlap we were consulting Dyke's Automobile Encyclopedia when we happened upon this gem in the section on Cooling. "Air cooling, however, is confined principally to small engines, as motorcycle and cycle-car engines. Air cooling is not successful with large cylinders."

Having thus cavalierly dismissed the entire subject of air cooling in no uncertain terms he then continues for four and a half pages on "Water Cooling Troubles." We fear Mr. Dyke's sense of humour was not of the highest order. Despite his frequent tendency to dogmatize we would be lost without this reference book and believe it should be in every member's library.

IMPORTANT NOTICE CONCERNING MEMBERSHIP

Beginning with 1957 the post of Membership Secretary is abolished.

All membership, new and renewal, is to be handled directly through the office of the Treasurer, Stanley D. Wilkinson, Jr., 1826 Gregg Street, Philadelphia 15, Pennsylvania. You will be billed from that office for your 1957 dues. Emblems, jewelry and back issues of ACN should also be ordered directly through the Treasurer's office.

The former Membership Secretary as well as several others will assist the Treasurer in garnering in the dues. BUT send all memberships to Philadelphia, not Cumberland from now on.

The routine business of the Club and the magazine is actually handled by less than a dozen members, that means hundreds of hours work for several individuals. If you do not pay your dues promptly some one has to write you a reminder, maybe several of them. It is not hard to see what this can amount to in work for someone who is already devoting more time than he should to club business. So, can't you do your little bit to help on club administration by sending in your dues to the Treasurer RIGHT NOW and not give some person extra work on your account. Does that seem too much to ask? Please remember that you will not receive the next issue of AIR COOLED NEWS until your 1957 dues ARE paid.

One of the regular membership application forms is enclosed with this issue. DO NOT use this for your own membership, use the form sent you from Philadelphia. The enclosed form is for your use in securing a NEW 1957 member. Better initial this form and we'll see if it ever turns up in Philadelphia! If you need more of them we will surely send them to you!

CRYSTAL GAZER WANTED

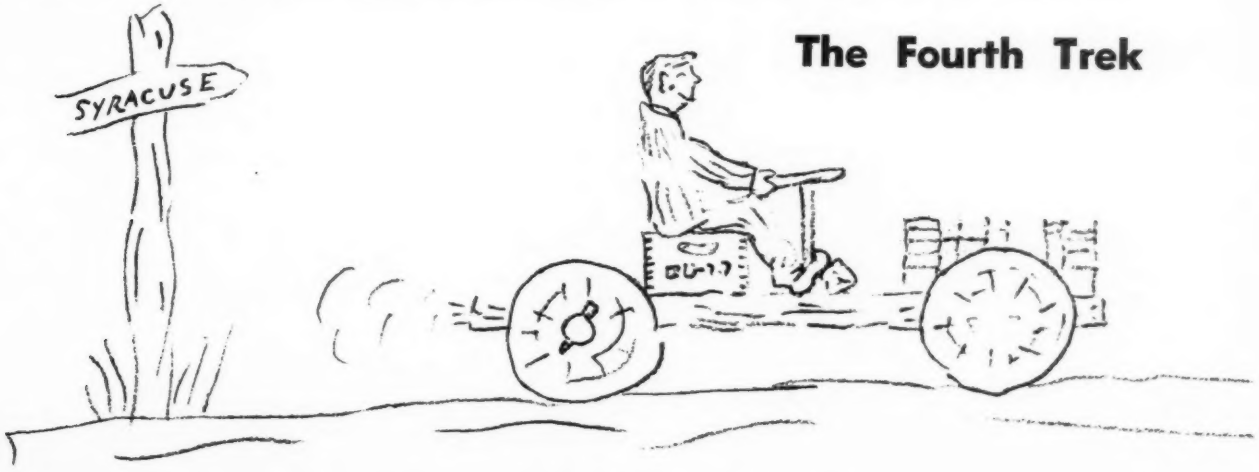
There is a good opportunity for a qualified crystal gazer on the staff of AIR COOLED NEWS. Steady work, good pay for the right man. In the meantime, until this position has been filled, why don't you just send in your change of address yourself.

LEGAL NOTICE

The July issue contained a letter from Dick Lamphere the Elder, whose Father and Son are likewise HHFC members, each generation of the family owns and drives a Franklin. Dick inquired if this might be a Club record.

We have been carrying on a long and amusing correspondence with Ronnie Andrew who kind of doubts if this is an exclusive Lamphere record. After much pseudo litigation we have come to the conclusion that the Andrew-Macauley combination is worthy of listing along with the Lampheres and Odells among the Franklin faithful. Ronnie may have a tenuous hold on the record as his late great-grandfather was also an owner and driver.

NOW what HHFC family has owned the most Franklins through the years? You have Karl Feather to beat on this one. Maybe we'll print your "pitchur" in the book.



"Come In A Franklin If You Can . . . "

THE MARKET PLACE

Classified advertisements are free to members, subject to available space. Advertisements from non-members may be accepted, without charge, at the discretion of the Classified Editor. Illustrated advertisements may be accepted if accompanied by a clear glossy photograph and a check for $4.00.

Members are reminded that misrepresentation in advertisements may result in their being dropped from the Club rolls. They are further reminded that the publishing of their advertisements entails an obligation to answer all inquiries.

Henry C. Courten, Editor, Box 127, Bethpage, New York

WANTED

1930 Franklin engine in good running condition or five or seven passenger sedan of the same year. Also need 1931 engine in same condition. C. R. Woods, Box 224, Wooddale, Illinois.

* * *

Owners instruction manuals for 1928 Series 12B and 1932 Airman. Robert M. Carter III, 16 S. W. Avenue, Tallmadge, Ohio.

* * *

WANTED to buy or borrow booklet entitled, THE FRANKLIN TREK, circa 1910. A. H. Amick, Cumberland, Maryland.

* * *

For 1933 Olympic—set of valve cage covers and felts. For 1928—hood ornament. Donald B. Baker, RG Box 262, Olympia, Wash.

* * *

For 1926 Series 11—headlight shells and complete tail lamp. Robert N. Long, 114 Pleasant Ave., Punxsutawney, Pa.

* * *

For 1923 Series 10B—hand brake drum, wheel key, hood support tube and rod, headlight brackets. Jack G. Thomas, 1207 Edna Pl. Macon, Ga.

* * *

For 1928 Franklin—speedometer, clock, clutch plate, and bumper center clamp. Will swap early catalogs and factory service bulletins for similar Stutz Items. A. K. Miller, West Topsham, Vermont.

* * *

For 1907 Model G—engine timing cover and crank. Parts were borrowed by a Franklin enthusiast while car was still on Waterman Estate, now urgently needed to complete car or will be glad to purchase replacements. Walter W. Fife, 633 S. Hendricks Ave., Los Angeles 22, Cal.

* * *

For Series 9B—5 lock rings for 24" Houck wire wheels. W. W. Norton, 2827 Woolsey St., Berkeley 5, Cal.

* * *

For Series 15—sirocco fan for engine. Frank W. Nash, Cherryfield, Maine.

LEADS

Series 19 sedan; upholstery, paint, chrome, and tires in first class condition. Original owner. $1500. T. B. Sweeney, 1818 Q Street, Washington, D. C.

FOR SALE

SALE OR TRADE: Large variety of parts, mostly Series 9 or later. Cylinders, axles, pistons, valves, connecting rods, shafts and a few body parts. Many other parts. Write your needs. Ronald M. Andrew, 77 Grove Street, Lonsdale, Rhode Island.

* * *

Several Franklin catalogues, 1905, 1910, 1014 etc., as well as other Franklin literature. Samuel Tanenbaum, Bookseller, 135 Magnolia Street, Hartford 12, Connecticut.

* * *

1925 Boattail Roadster. Price $425.00. Richard T. Stafford, 1638 Sutter Street, San Diego, California.

* * *

1934 Series 19B Sedan. Will sell complete or parts. Also have various parts 1922 - 1932. Paul W. Gockel, 17015 Throckley Avenue, Cleveland 28, Ohio.

* * *

1934 Town Car. Good as new, less than 60,000 miles. Is in excellent condition. Asking price $2,000.00. Thomas B. Sweeney, 1818 Que Street, N. W., Washington 9, D. C.

1917 Franklin, two door, Vee windshield sedan, extremely rough, sell all or parts, $100.00. 1921, chassis only, runs like new, good hood, wheels, etc., all or parts, $125.00. Neal L. Kemble, 518 33rd Street, Bakersfield, California.

* * *

New timing chain for 1928 - 1934. Snap on hub caps. Some other parts from 1908 on. A. H. Miller, West Topsham, Vermont.

* * *

Used Franklin parts, most models. Ed Landmichl, 3826 W. 65th Place, Chicago Lawn 29, Ill.

* * *

Series 11 Instruction Book, fine condition, $12.50. Several early catalogs in mint condition, $25 each. Some pre-1914 Franklin cars located in the North, not cheap, Neil C. Ensworth, 215 23rd Ave. No., St. Petersburg, Fla,

* * *

Tires: One Super Service, one Ward—6.00-6.50X19, below 500 miles, $15 each or both for $25. Good extra casing, $5 or $27 for all three. One 7.00X19 with ¾" tread, $10. Spare tire bracket, front splash apron, rough front fenders, series 16, pay only freight. 19" wood wheels, $4 each. Mario Cuniberti, California P.O., Maryland.

* * *

1931 "le Pirate" sedan, believed to be the car built for 1932 Auto Show. See Classic issue. Has all-new brake system, new glass, 42,000 miles, primed, good tires, runs well. Sell for investment of $395. Robert Kennedy, 43-42 Bowne St., Flushing, N. Y.

* * *

1923 Series 10B, 4-door sedan, restored; new paint, upholstery, Firestone tires, chrome. Varnished wheels. Runs fine. Must sell for lack of space, $395. Sy Morris, 1208 Leeper, South Bend, Ind.

* * *

1932 Airman convertible, fair to rough body, good tires, fair top, new battery, can be driven home. Make offer above junk price. C. F. Daly, 717 E. High, Mt. Vernon, Ohio.

* * *

From 1905 Franklin roadster—beautifully made brass bound mahogany tool box, very good condition. See pictures of roadsters in Issue 6. Best offer. Dr. W. C. Norcross, East Walpole, Mass.

* * *

Several original Franklin feeler gages, believed for Series 9, nice to complete your original tool kit, $1, money to go to HHFC treasury. Clifford Boram, 104 Oak St., Maywood, Ill. (Ed. Note: Can someone help Cliff out with an oil pressure gage for his 11B?)

FRONT COVER: A 1906 on the old National Pike bridge, near Cumberland, Maryland. W. L. Wilson Collection.

REAR COVER: Advertisement based on Transcontinental run of 1906. Courtesy Onondaga Historical Association.

INSIDE FRONT COVER: Two 1908s. Mr. Wilkinson is at wheel of front car. Mrs. Wilkinson on running board of other car. Courtesy Mrs. John Wilkinson.

INSIDE REAR COVER: Mr. Earl Buchman with our Glidden award. Courtesy Dr. Wendle Stadle, Glidden Chairman, VMCCA.

Air-cooling doesn't cool, eh?

How about that 15-day Franklin record from San Francisco to New York—4500 road-miles in August weather—600 miles through the Great American Desert. Could any other automobile have done it?

Send for the book. Franklins are $1800 to $4000.

H. H. FRANKLIN MFG. CO., Syracuse, N. Y. Member Association Licensed Automobile Manufacturers

FRANKLIN